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<http://dx.doi.org/doi:10.21954/ou.ro.0000f123>

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Hyperlocal online deliberation and civic governance: a socio-technical perspective.

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Submitted for the degree of Doctor of Philosophy
to the Department of Computing
Open University

23 September 2012

DATE OF SUBMISSION : 26 SEPTEMBER 2012
DATE OF AWARD : 11 JUNE 2013

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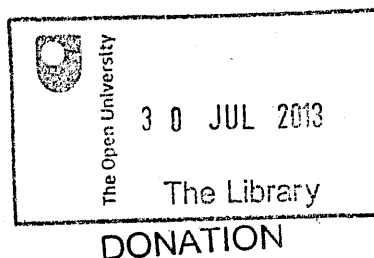
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Abstract

This dissertation concerns the role of online deliberation in hyperlocal governance, that is the self-governance of a small geographically bounded neighbourhood or community. The research has three closely related but distinct purposes: to assess the impact of online technology in terms of the emergent character of self-governance; to describe the social and technological relations that produced the observed impact; and to suggest explanations that link those socio-technical relations with the observed governance effects. The work draws upon concepts at the intersection of theories from human-centred computing, especially those that relate to online deliberation, and from political science, where direct deliberative democracy offers an evaluative benchmark for democratic governance.

This interdisciplinary theoretical framework provides the basis for a case-based analysis of empirical observations of online interactions relating to hyperlocal governance. The study describes and analyses patterns of "governance conversation" observed in interactions on local e-mail lists, and shows how they facilitate the pluralist deliberation required to manage complex local governance problems. The analysis suggests how geographic proximity presents both distinctive opportunities and constraints for online deliberation that aspires to support direct, democratic process and practice.



Acknowledgements

This research would not have been conducted if it weren't for the support, assistance and guidance of several people.

Firstly, I am grateful to members of the case community, in particular interview participants, for their trust and gracious assistance.

I would like to express my sincere gratitude to my supervisors, Anthony Meehan, Engin Isin and Mark Gaved. Anthony Meehan supported me from research proposal, through bidding for funding, and subsequently saw me through every step of the process with astute guidance. While he had a busy schedule as Associate Dean, Anthony found time to attend conferences to show me the ropes and discuss my research; after retiring, he none the less spent a summer wading through my thesis drafts. Our discussions have been stimulating, and advice was invariably well timed - he is a mentor who I hold in highest regard. Engin Isin provided enthusiasm and encouragement, and invariably asked the right questions. I appreciate that he found time to assist a clumsy computer scientist through new philosophical territory, and that he did so with great kindness. Mark Gaved I need to thank first and foremost for the generous help even before he joined the supervisory team, and for putting me up grandly in Wolverton whenever I visited the UK. Mark spent his summer break reading detailed drafts, and my work is the better for his librarian rigour and clarity.

I would also like to thank the student research team in the Computing department who funded my work, and who allowed me the unusual arrangement of conducting a full time PhD working remotely from the location of the case study in South Africa.

Their trust was a source of inspiration, I hope my output will do their decision justice.

My appreciation also to advisors - Mike Gurstein for a grounding in Community Informatics, Leonor Barocca and Mike Saward for valuable input during probation.

On a personal note, more than anything, the final word of gratitude has to go to Tania, my life partner, for patiently living with a PhD in the making for four years. Please forgive me the hundreds of coffee breaks and dinners spent rambling about the work, the weekends and holidays at the screen. I promise it's your turn now!

Publications

The following publications contain one or more sections of the work presented in this dissertation:

van der Merwe, Rean and Meehan, Anthony (2012). Direct Deliberative Governance Online: Consensual Problem Solving or Accommodated Pluralism? *Journal of Information Technology & Politics*, 9(1), pp. 46–63.

van der Merwe, Rean and Meehan, Anthony (2011). Direct democracy catalysed by resident-to-resident online deliberation. In: Tambouris, Efthimios; Macintosh, Ann and de Bruijn, Hans eds. *Electronic Participation. Lecture Notes in Computer Science* (6847). Berlin / Heidelberg, Germany: Springer, pp. 169–179.

van der Merwe, Rean and Meehan, Anthony (2010). Direct deliberative governance and the Web: The collaborative work of democratic decision-making mediated by an online social environment. In: Lewkowicz, M.; Hassanaly, P.; Rohde, M. and Wulf, V. eds. *Proceedings of COOP 2010. Computer Supported Cooperative Work*. London, U.K.: Springer, pp. 183–202.

van der Merwe, Rean and Meehan, Anthony (2010). Direct deliberative local governance using online media – consensual problem solving or a recalcitrant pluralism? In: De Cindio, F.; Macintosh, A. and Peraboni, C. eds. *From e-Participation to Online Deliberation, Proceedings of the Fourth International Conference on Online Deliberation, OD2010*. Leeds, UK, 30 June - 2 July, 2010. Leeds, UK: University of

Leeds.

van der Merwe, Rean D. and Meehan, Anthony S. (2009). e-Governance: Supporting pragmatic direct deliberative action through online communities of interest. In: *Proceedings of the 3rd International IDIA Development Informatics Conference*, 28-30 October 2009, Berg en Dal, South Africa.

van der Merwe, Rean (2008). e-Democracy driven by civil society: Developing a theoretical basis to design for bottom-up participation. In: *5th Prato Community Informatics & Development Informatics Conference*, 27-30 October 2008, Prato, Italy.

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1 Introduction

This dissertation concerns the role of online deliberation in the self-governance of a geographically bounded neighbourhood or community. In so doing, it draws upon concepts and ideas at the intersection of theories in human-centred computing relating to online deliberation with the political ‘ideal’ of direct deliberative democracy (Cohen, 1999; Gutmann & Thompson, 2004), using this ground as the basis for a case-based analysis of empirical observations of online interactions relating to local governance. By choosing to focus upon a specific, relatively well-bounded community it has been possible to identify and understand some of the ways in which the use of online technology has lead local citizens to re-approach governance of the near or local. At the same time it has suggested how geographic proximity presents both distinctive opportunities and constraints for online deliberation that aspires to support direct democratic processes and practice.

1.1 Problem description

The majority of academic research in the related fields of e-democracy, e-participation and online deliberation, have studied either top down initiatives which have aimed to engage citizens with government (De Cindio & De Marco, 2007; Dahlberg, 2001; Fishkin, 2009; Price, 2009) or broad-based, bottom up initiatives of citizen activists (Garrido & Halavais, 2003; Vegh, 2003). The associated literature indicates that these two modes of citizen engagement are characterised by large-scale and distributed participation and by an imbalance of power implicit in the interaction between individual citizens and government. Researchers have most commonly investigated how online technology transcends the limitations of geography and scale, and how it allows local interests to be democratically represented in institutionally driven processes at city, regional or national level. Even those more critical of the role that online technology might play (Hindman, 2008; Vedel, 2006) nonetheless follow similar lines of inquiry in which the online public sphere is often

implicitly considered as a mediating space between citizens and their elected representatives and/or government officials.

In contrast, the research presented here focuses on the role of online tools in a context of governance that is local, geographically bounded and small in scale, and which does not primarily concern itself with the engagement between citizens and institutions of constitutional government. What I refer to as *resident-to-resident* deliberation is distinct both in terms of its hyperlocal scope and its examination of the specified ideals envisioned of online interaction.

The research aims to make a timely contribution in that the adoption and appropriation of simple, free online communication tools such as bulletin boards, forums and mailing lists to support civic governance conversations between residents (Castells, 2007) now coincides with a new emphasis on hyperlocal governance within the discourse of government and the public sector. While previously much of the attention was focussed on the role of the non-governmental 'third sector' to empower civil society (Haugh & Kitson, 2007), the arrival of a world-wide economic downturn and resulting cuts in public funding has shifted responsibility to an even lower tier of organisation - to the level of village or neighbourhood. (In the United Kingdom for example, the recent Localism Bill ("Localism Bill," 2010) attempts to pave the way for this legislatively.) With this shift, there is a concomitant top-down vision that sees technology being used to empower civil society, for example by increasing transparency through open data initiatives such as 'Data.gov' (*Data.gov*, n.d.) in the United States. The uptake of this vision is encouraged by frequent reports in the media of initiatives where citizens self organise, using "government as platform" (O'Reilly, 2010), with the aid of online tools. Websites such as "Fix My Street" (*FixMyStreet*, n.d.) and "Apps for Democracy" (*Apps for Democracy*, n.d.) are reported as the vanguard of what some have enthusiastically labelled the rise of "Citizen 2.0"

(Drapeau, 2009). A recent study (Flouch & Harris, 2010) reported the existence of 160 such “hyperlocal” online initiatives in London alone.

Much as these spaces may represent a victory for “detached citizen interest ...contributing to the changing nature of democracy” (Flouch & Harris, 2010, p. 6) it must also be allowed that they may prove to be less than ideal in respect of normative understandings of democratic practice. One problem with these bottom-up technology implementations is they have often been ad-hoc (Engeström, 2007), another is that they are underpinned by an implicit assumption that the introduction of the technology can but strengthen local deliberation and co-ordination, requiring only that the tools are sufficiently used.

At its inception, the research presented here sought to address the relative absence of grounded research into self-governance of local (geographically co-located) communities at the level of citizen-to-citizen deliberation and to test some of the implicit assumptions made by those developing or adopting the technologies. A distinctive feature of geographic proximity (or the hyperlocal) is that there is an increased likelihood that, even where participants do not already know one another, they will have relatively few degrees of separation (Travers & Milgram, 1969) and share a familiarity with local context, and anticipate a high likelihood of future interaction. As a result, the localness of interaction may afford a more personal style of engagement - for better or worse. While smaller scale online interaction is not unheard of in a regional discussion, in the case of a neighbourhood forum, the membership represents a far larger proportion of the potential audience.

Participants are motivated by their need to engage with issues that are near to home and that have an immediate impact on their lives. Where problems are close to home, there is larger potential that participants are both knowledgeable about the issue and likely to engage directly in action. This broadens the potential forms of productive interaction, otherwise consisting largely of debate on matters of policy or transparency, to be more

directly orientated to the implementation of solutions, or even the co-ordination of action as it happens. The local context of a village or neighbourhood forum is interesting exactly because the interaction of the online and off-line is most visible there, and for the directness of engagement that very local issues afford.

1.1.1 Theoretical approach

In seeking to examine the role of an online technology which supports deliberation the research draws upon three main research domains for three related but distinct purposes: first to assess impact in terms of the character of governance, second to describe the social and technological relations that produced the impact, and thirdly to suggest explanations that link those relations with the observed governance effects.

The political theory of direct deliberative democracy (DDD) (Cohen, 1999; Gutmann & Thompson, 2004) is used to examine impact on the character of governance because it presents an attractive ‘ideal’ for hyperlocal governance where citizens can make collective decisions through public deliberation, while their choices are examined in the light of relevant deliberations in comparable situations. The direct deliberative process potentially combines the advantages of self-government and local learning with wider processes of social learning and heightened political accountability. As a complement to representative models, direct deliberative democracy informs especially local, self organised forms of governance: “[b]ecause of the numerosity and diversity of sites, we want a structure of decision-making that does not require uniform solutions ... because of the complexity of problems, we want a structure that fosters inter-local comparisons of solutions” (Cohen & Sabel, 1997, p. 16). Most proponents of the model do not propose direct democracy instead of representative democracy, not even at local level, but, as Barber put it, to “thicken thin democracy with a critical overlay of participatory institutions” (2003, p. xvi). In the context of this research, the theory of direct deliberative democracy is not only useful for

the normative ideal it offers, but exactly because the most common criticisms of its implementation (Dahl, 1991) are very relevant to local governance. To treat either democracy, directness or deliberation uncritically would be as short sighted as taking a simple normative approach to the concept of 'community.' Instead exactly the questions raised by these normative points of reference present lines of enquiry that potentially deepen our understanding of local online deliberation.

To gain a clear understanding of how online interaction shapes local governance requires a well articulated account of the emergence of the social role of technology. One (still prevalent) account sees the very fact of deploying technology as determining the way people will relate to it, individually and/or collectively. An example is the 2008 UN global e-government survey (Bertucci, 2008) which takes as given that communication technology will improve co-ordination, and, in so doing "improv[e] the efficiency and productivity of government processes and systems" (p. xii). A similar deterministic view of technology frequently informs bottom up implementations - where technology is introduced in response to a desire to improve communication, streamline process, or simplify the co-ordination of local governance.

An alternative account of the social role of technology is critical of deterministic conceptions and maintains that "...effects will always depend, at least in part, on how people understand these technologies and choose to use them" (Markus, 1994; p. 146). The Socio-technical System (STS) approach (Kling, McKim, & King, 2003) provides a strong framework to describe the social role of technology in non-deterministic terms.

This study views online spaces as socio-technical systems (Kling et al., 2003), focusing on the engendered roles and processes arising from the adoption of technology within local governance. The influence of online media on local governance is considered from the

perspective that "socio-technical developments do not determine political outcomes, but instead simply alter the matrix of opportunities and costs associated with political intermediation, mobilisation, and the organisation of politics" (Bimber, 2003; p. 231).

To make tangible Bimber's 'matrix of opportunities and costs', this study adopts the notion of Transaction Costs (Ciffolilli, 2003; Coase, 1937) to help to explain how a technology might shape the behaviour of rational actors. A similar approach has been taken by Cordella (2006) when applying transaction cost theory to new ICT implementations, demonstrating that while some coordinative costs are lowered by a new technology, new costs are typically introduced. For example, new technology may help to make information more accessible, but also lead to information overload, which 'rational' actors choose to avoid. (The term 'rational' actor is used here and throughout this text in the same sense that Markus and Robey (1988) and Markus (1994) – drawing in turn on Kling (1980) - makes use of the term, that is, to acknowledge the contribution of purposive human behaviour in the emergent social role of technology. It is not my intention to portray rational actors as they appear in Rational Choice Theory employed in economics (Scott, 1999).)

1.1.2 Research questions

What one might think of as the 'narrative thread' of investigation is commonly implemented in HCI research as a series of research questions, set to guide the research and provide narrative structure. However, in a grounded research approach (Glaser & Strauss, 1977), it is difficult, and often not desirable to provide such detailed questions up front. Stake (1995), a key reference on qualitative, interpretive case study research, prefers to use a series of emergent case "issues" – themes or specific aspects of enquiry that develop as the case gains depth. As with research questions, the issues help both researcher and reader to unlock the deeper, more complex relationships and dynamics within the case.

Given my research orientation within HCI, the research has focussed not so much on deliberation per se, as on the influence that online communication tools or environments have on deliberation and the associated governance process. The study has deliberately aimed to be agnostic as to particular deliberation tools to the extent that many affordances of the online environment are shared in common.

I focus on hyperlocal processes of governance, where communication between residents directly tackles local problems, or informs the resulting collective action. This makes the implicit claim that the hyperlocal context of a geographically bounded neighbourhood or community is distinctive in terms of both civic governance and the potential impact of tools employed to support the process. In this study I am not interested so much in the theme of technology overcoming place and scale, as in the ways in which 'localness' exactly has a unique influence on the role of technology.

By adopting direct deliberative democracy as my normative framework, a number of questions are posed of the technological mediation of governance process: How does the introduction of online tools impact *directness* - the degree to which residents become involved in governance? How is the character of their *deliberation* subsequently affected? Overall, is the nature of governance significantly altered in view of the foundational principles of *democracy*? A number of challenges are commonly recognised concerning each of these aspects of direct deliberative democracy, and understanding how technology mitigates these may unlock answers to some of the broader questions.

Having stated preliminary research issues, this thesis revisits these more fully in succeeding chapters. The literature review expands the theoretical basis of these questions, considering the constituent problem components of local or community governance, direct

deliberative democracy, and the potential role of online technology. I discuss in the next section how a research design has further been implemented to best accommodate Stake's advice that "the best research questions evolve during the study" (Stake, 1995, p. 33).

1.2 Approach

1.2.1 Method and epistemology

The relatively unexplored territory of hyperlocal online deliberation motivates the use of a case study approach. While I have discussed some of the high level theory that I draw on, the main research tasks are to explore and identify phenomena that allow me to test linkages to theory developed in other domains, or at different levels or scales of governance interaction. The case study is accordingly used as a form of grounded account (Stake, 1995), albeit informed by an acknowledged and iteratively developing theoretical framework, what Carrol and Swatman (2000) refer to as a "structured case".

The structured-case research framework features a process model with three components:

- An evolving conceptual framework representing the current state of a researcher's/evaluator's aims, theoretical foundations and understandings. The researcher begins with an initial conceptual framework based upon prior knowledge and experience and iteratively revises it until the enquiry terminates.
- A research cycle structures data collection, analysis, interpretation and synthesis.
- Literature-based scrutiny is used to compare and contrast the evolving outcomes of the enquiry with literature.

In common with grounded theory, the structured case approach encourages the researcher to produce new or revised knowledge that is demonstrably rooted in observation (Heath & Cowley, 2004). However, Carol and Swatman's approach more strongly accommodates an initial conceptual framework or theoretical framing, rather than striving for the 'ideal absence' of such commitment at the outset.

On the basis of structured case as the structural framework, the study makes an in-depth, contextually rich account of the governance practices of one community, reflecting on observations in the light of the ideals of direct deliberative democracy. Its claim to theoretical validity is not so much in reasoning from a representative sample to population, but from case to theoretical constructs (Myers, M, 2009; Yin, 2003), taking from Flyvbjerg (2006b) that it is a misconception that "[g]eneral, theoretical (context-independent) knowledge is more valuable than concrete, practical (context-dependent) knowledge" (p.421). Epistemologically, I take an interpretative, constructivist approach. From this perspective governance is in the first place a co-constructive (Hauser, 1998) process - the shared defining of social reality and the possibilities for action therein, rather than a matter of primarily deciding between pre-existing options by a vote or poll (Cohen & Sabel, 1997).

1.2.2 Case summary

I investigate local governance at hand of a case study of a small, geographically co-located community of approximately 1200 residents on the urban edge of a large city in South Africa. Culturally, the community is relatively homogenous; the population might be described as predominantly middle class working families. As such, the community demographic is not a significantly representative sample of wider South African society. South African history, and specifically planning and development under apartheid, has produced a situation in which the demographics of any small, geographically co-located

community is very unlikely to be representative of the wider society. However, whilst the roots of the cultural homogeneity may be distinctive, cultural homogeneity itself is a feature of many semi-urban or village communities of similar size, be they in South Africa or in other parts of the world, including Europe and the United States. (See section 3.3.2 for an account of the case selection logic and Chapter 4 for a fuller account of the case community.) If anything, many of the complexities that might be introduced by a more diverse demographic are deliberately avoided by the choice of case community.

Accordingly this study does not aim to make any comparative claims in the larger South African context, or of the South African governance environment versus any other. It is, however, worth stating that the case context affords a stronger case study of direct governance than may have been possible in many parts of the first world. Because of geographic distances, relatively low population density and limited human and financial resources, formal government in South Africa has relatively limited capacity at local level (Wunsch, 1998) creating the need for stronger civic structures.

While the study largely focuses on interaction through (and as a result of) three associated email lists that had been established by the community residents association, the analysis focuses where both off-line and on-line deliberation between residents directly concerns questions of local governance. To this extent the case study presents an example of "neighbourhood democracy" (Barber, 2003; Leighninger, 2008). However, it should be distinguished from studies of online neighbourhood democracy, or more broadly online deliberative governance, where the research focus is on the interaction of citizens with government. In this instance, the online discussion spaces were conceived, set up and are maintained entirely as a spontaneous volunteer effort by members of the community; formal government, e.g. the city municipality, are neither the object of, nor significant participants in, the conversations. Dialogue is between residents and largely concerns how they and their residents association might directly resolve local issues.

1.2.3 Stages of data gathering and analysis

The research draws on archived primary data - the records of online discussions in two closely related email lists over three years - as well as basic quantitative statistics of interaction and a series of in depth interviews with participants to elicit their interpretation of specific discursive events. My interpretation of this data is further informed by additional semi-structured interviews with key local role players, the minutes of community meetings, as well as field notes of governance events and informal conversations with community members during the same period.

I develop the resulting case study in three stages of data gathering and analysis, each effectively an iteration through the structured case process model, building on the findings of the previous:

The first stage establishes a foundational description of the governance context and the relevant online interaction. The case is described, and basic qualitative data is presented to form an initial impression of both interactions, and participants on the lists. Following this, a first round of content analysis is conducted on the list archives, presenting a topical outline of the content of the lists, as well as providing the basis, following further reflection on the theoretical frame, for a refined set of codes to be used in a following round of content analysis.

The second stage conducts more detailed content analysis, coding the individual messages within discussion threads, and reflecting on the outcomes in the light of supporting data and follow up interviews. A number of patterns of 'governance conversation' are presented as an analytical device, the result of grouping threads of conversation that share particular attributes. The occurrence of codes within the contributions of individual contributors is

also investigated to establish the extent of their contribution to particular forms of interaction.

The third stage conducts in depth interviews with participants on the community lists, as well as a small group of research students to provide an external perspective. A triad card sort technique is used, where 30 messages are sampled to represent the patterns discussed in the previous phase, and presented to participants to analyse and discuss. The objective is to elicit their understanding of messages - the broader constructs (Kelly, 2003) that community members consider significant and the detailed pragmatics (Habermas, 1987) that inform each conversation. The outcomes of the card sort interviews are analysed in their own right, but also reflect back on the interpretation of interactions made in previous stages of work.

1.3 Why is the research potentially significant

Overall, the perspective I take challenges assumptions of online deliberation as mainly policy debate between citizens and government, or of petitioning government locally. I also propose a broader conception of the role of online deliberation in local governance, where instrumental decision-making (Gutmann & Thompson, 2004) and developing consensus is frequently privileged in research. The dynamics observed in the case study further raise a number of pertinent issues relevant to the design and implementation of systems to support such local governance conversations.

The intersection of localness with online deliberation is not yet well understood, particularly where the resulting space is conceived as not primarily a mechanism to engage government, but a place where opinions are formed and options for local governance action are defined independent of a top down agenda. The notion that governance is in the first place a process of co-creation relates strongly to Foucault's notions of power in the

production of knowledge or truth, that "[power] produces reality, it produces domains of objects, and rituals of truth" (Willcocks, 2004).

What further distinguishes this study significantly from others focusing on a similar scale of online deliberation, for example the recent "Online Networked Neighbourhoods" study referenced earlier (Flouch & Harris, 2010), is the in-depth, interpretative approach. It represents the hyperlocal studied from a hyperlocal perspective afforded by six years of first hand engagement within a community.

1.4 What follows

In the next chapter, I discuss literature relating to the research problem, covering broadly three areas: local governance and the concept of community; the theory of direct deliberative democracy; and theory relating to socio technical systems and the role of online technology in governance. In chapter three I discuss the data gathering and analytical methods I have applied in terms of research design and epistemological perspective. Chapter four gives a relatively compressed account of the case context. I then present the results and analysis of each of three stages of data gathering, with further detailed notes on method applicable to each, in chapter five. I begin chapter six by evaluating the strengths and weaknesses of evidence presented from a constructivist perspective, before going on to discuss my observations in light of the socio technical systems and transaction cost theory perspectives. I then evaluate the findings in light of democratic theory: how might online communication have impacted known criticisms of direct deliberative democracy, and more generally what was the impact on the directness, deliberativeness and ultimately democratic nature of local governance. Section seven finally presents conclusions, as well as a reflection on potential future work following from questions raised by this research project.

2 Literature review and theoretical framing

In this chapter I review three fields of literature that have bearing on the problem domain.

In the first section, I discuss literature relating to civic governance (as opposed to government) and the related shift to more local and hyperlocal forms of community governance. The concept of ‘community’ is often used uncritically and so I examine a range of literature addressing its nature and place my own use of the term on a clear footing. In the second section, I discuss theory relating to direct deliberative democracy as a normative framework for evaluating governance process and practice, focussing particularly on literature relating to how the concept might be applied to local governance. I also review a number of common criticisms of both direct and deliberative democracy which opened up useful lines of enquiry for the study. In the third section, I discuss theory that informs my understanding of the potential role of online technology in local governance. I consider a number of potential perspectives, including network and socio technical systems approaches. I also look at an transaction cost theory as an explanatory basis for behaviour in the context of the adoption of technology. Following the discussion of a broad technological frame, I also briefly review and discuss literature that references technology in democratic governance, situating my work in the broader discourse of online deliberation.

In keeping with the structured case approach, the literature that I consider in each of these sections emerged throughout the study. The account I make in this chapter, however, gives a reflective, post study account of the concepts that most directly inform the framing of my approach, as well as analysis and discussion of results.

2.1 Local governance and social action

2.1.1 Local governance

In the context of civil society, the term governance is frequently "used to describe governing arrangements that are more than or greater than merely the institutions of government" (Kelly, 2006, p. 605). Kelly claims that, in the literature on public policy and administration, this interpretation of governance now dominates contemporary debates. A more detailed definition by Osborne mainly expands on the civic governance process: "all those interactive arrangements in which public as well as private actors participate aimed at solving societal problems, or creating societal opportunities, and attending to the institutions within which these governing activities take place" (Osborne, 2002, p. 47).

While commenting particularly on changes in local government, Andrew (1998) proposes there has been a shift in attention from government toward governance - the result of globalisation, market forces and increased complexity in the environment (in some measure accelerated by communication technologies). Boyte (2005) frames the change as a "paradigm shift in the meaning of democracy and civil society" (p.1), a shift away from citizens as simply voters or the consumers of services, to citizens who are actively involved in problem solving and decision making, the organisers of citizen action. The traditional notion of what it means to be a citizen, of the relationship of subjects with a state, has evolved to encompass a much wider range of actions and contexts (Isin, 2008). What Isin refers to as 'Activist citizenship' implies diverse forms of involvement, in issues that may be beyond the mandate of institutional government in any number of ways – for example because they are too local (Cohen & Sabel, 1997), not yet 'on the agenda' (Lukes, 1974), or even outside of its constitution (Lessig, 2006).

This study is similarly concerned with civic governance from a perspective that acknowledges the significant role of the formal institutions we call government, but more

broadly considers the role of citizens in governing the world they are part of. While for Boyte (2005) the shift toward governance is none the less focussed on the relationship of citizens with a state - the potential to address problems which neither civil society, nor government can solve on their own - this research is focussed upon governance issues that citizens are able to address directly. In this context, public participation involves more than interacting with government about policy, but also direct involvement of citizens in decision-making and also implementing acts of governance.

Boyte (2005) makes an appealing summary of the process of civic governance as a "political but nonpartisan process of negotiating diverse interests and views to solve public problems and create public value..." He adds that, as a result, "[p]olitics is citizen centred, productive, and pluralist...[g]overnance involves collaboration and empowerment more than hierarchy and control..." (p. 2). However, others emphasise negative aspects: Kelly (2006) concludes that the concept of governance is used "to explore the diminishing capacity of the state to direct policy-making and implementation..." (p.605), citing Rhodes (1997) who refers to this as the "hollowing out of the state". Rhodes characterises the shift as one from government by a unitary state to governance through complex networks, requiring the 'central executive' to resort to diplomacy rather than control. This is problematic to the extent that governance networks are subject to private agendas - rather than the social contract that directs the actions of government toward public interest. Sorenson (2005) questions whether such networks are sufficiently democratic on the basis that participants are more often than not driven by private interest. She accordingly emphasises the need for governance networks to be anchored in elected politicians and a democratic 'grammar of conduct'.

The picture that emerges from the literature is however that the move from government to governance is less a matter of top down policy than of contingency, the result of social and

economic forces over which governments have limited control (Andrew & Goldsmith, 1998; Cohen & Sabel, 1997; Isin, 2008; Rhodes, 1997). In practice, the notion of civic governance is likely to remain relevant much as there are questions about its relationship with democracy. Because these questions fundamentally frame this study, the following section discusses governance in light of theories of democracy, and will particularly expand on civic governance as a form of 'direct democracy'.

Concomitant with the move to governance there has been increased focus on decentralisation, or more local forms of government. In the UK, the new Localism bill ("Localism Bill," 2010) is presented as one outcome of the attempt to devolve more power to local authority. Of course, localism is not a new idea - this legislation has earlier history in the 'new localism' (Stoker, 2004) of the previous Labour government in the UK, in turn for example strongly drawing on the popular resurgence of localism three decades before (Schumacher, 1973). Andrew (1998) proposes the discourse of governance is additionally driven in the US by the national values of the 'sovereignty of the individual' and 'local choice.' In southern Africa, where this case study is based, the turn of the century similarly saw renewed interest in local governance as the limitations of centralised administration became increasingly evident in the region (Wunsch, 1998).

Pratchett (2004) claims that within political theory, there has been normative support for local self-government since the work of Tocqueville in the nineteenth century. John Stuart Mill (Andrew & Goldsmith, 1998) outlined two virtues of local elected government: that it widens opportunities for civic participation, and has the ability to oversee local affairs "based on local knowledge, interest and expertise" (p. 109) making it more likely that central government would provide efficient local services. In a recent review of literature, Pratchett (2004) makes a similar summary, adding in particular pluralist arguments that local democracy provides for a diffusion of power in society, and that it encourages

national policy to be sensitive to the diversity of local contexts. Pratchett however distinguishes local democracy from local autonomy on the basis that local democracy does not necessarily imply the power to decide or act. In his view, some degree of autonomy is required if local institutions are to be venues for the deliberation and collective resolution of potentially competing local values and priorities. He thinks of local autonomy as a bottom-up phenomenon, more than freedom from top-down constraints, “the capacity to define and express local identity through political activity” (p. 111). Stoker (2004) proposes that locally fostered trust, empathy and social capital in turn encourages civic engagement in the broader sense. Pratchett suggests that beyond its direct ends, local self government also becomes “an essential feature of a broader democratic polity” (Pratchett, 2004, p. 111).

Similar concerns are raised about localism as with civic governance: that the local decision-making process is potentially usurped by boundary politics (Cashin, 1999), and parochial or individual concerns (Cohen & Sabel, 1997). As Stoker (2004, p. 122) puts it, “[b]ehind the romantic notions of community lurks a real world of insular, ‘not in my own back yard’ politics.” It may be that localism, left unchecked, is inevitably self interested and therefore incompatible with the democratic values of societal fairness and equity (Cashin, 1999). Cashin outlines how, in what she refers to as the “hegemony of the favoured quarter”, localism allows a relatively advantaged minority in society to monopolise public resources while further not carrying a fair burden of the social cost. In her view, only the affluent suburbs enjoy the full benefits of localism. Cashin advocates stronger regional governance networks as a solution. This is reminiscent of Cohen’s vision (Cohen & Sabel, 1997) of a ‘Direct Deliberative Polyarchy’, a topic I will return to in more detail in Section 2.2: “[b]ecause of the numerosity and diversity of sites, we want a structure of decision-making that does not require uniform solutions ... because of the complexity of problems, we want a structure that fosters inter-local comparisons of

solutions" (p. 16). Mohan & Stokke (2000, p. 265) caution against two further aspects of localism: that civil society is understood in opposition to the state, an alternative to "unresponsive or inefficient" state institutions; and the local "essentialised" as discrete places which host homogenous communities. The former in his view goes against a trend towards emphasising state-society *relations* in studies of politics; the latter against the understanding that places are constituted by relations that "extend far beyond a given locality." In the next section I consider the notion of 'community of place' (Flora, 1998), which exactly interrogates the relations that constitute the local context.

2.1.2 Community and networked society

2.1.2.1 A definition of community

In the previous section, the discussion of localness touched on the difficulties raised by a spatial interpretation of place, in particular when this attempts to associate with a similarly bounded understanding of 'community.' In discussions of local governance, the term community is often used uncritically or even rhetorically in a way that brings strong normative assumptions but only loosely defining what is actually meant by the term. For example, The Big Society initiative in the United Kingdom is advocated to "create a climate that empowers local people and *communities*" ("Government Launches Big Society Programme," 2010), while critics consider that this is empty rhetoric, "dressing up [the initiative]...with the language of invigorating civic society" (Watt, 2010). To the extent that my research, too, invokes geographically bounded community, I attempt to clarify the basis for its use.

Researchers acknowledge that the term 'community' is notoriously hard to define rigorously (Amit, 2002; Bell & Newby, 1974), though it is understood well enough in informal conversation (Loader, Hague, & Eagle, 2000). Bell and Newby (1974) maintain that most formal definitions focus on what community ought to be, rather than what it is,

and propose further confusion stems from the writing of Tönnies in late 19th century that is regularly cited as foundational source. Tönnies (1974) distinguished between 'gemeinschaft' (meaning community - including specifically kin, neighbourhood and friends) and 'gesellschaft' (society or association). He considered gemeinschaft a more cohesive social entity than gesellschaft, because gemeinschaft was characterised by a "unity of will". Tönnies further illustrated that a young person can be warned of keeping bad association, but not bad community. Bell and Newy (1974) remark on the value judgements embedded in this framing of community, as well as the fact that community is conferred on a specific locale while recent research suggests both gesellschaft and gemeinschaft are likely found in the same geographic community.

In a more strongly worded dismissal of 'community' as it is commonly used, Bauman (2001) declares that "[c]ommunity' is nowadays another name for paradise lost - but one to which we dearly hope to return, and so we feverishly seek the roads that may bring us there" (p. 3). Community is seen as an imagined state of being from which we infer social values - much as we have no idea how to reconstruct this ideal that Bauman suggests was never in fact realised. In similar vein, Postill (2008) proposes: "[C]ommunity merits attention as a polymorphous folk notion widely used both online and offline," but goes on to say that "as an analytical concept with an identifiable empirical referent it is of little use" (p. 416). He cites the writing of Amit and Rapport (2002), who oppose the notion that community remains a valid term because of the attachment that people have to it, by insisting we should not conflate cultural categories with actual social groups. They claim that such broad categories are poor predictors of which social relations will be mobilised in a particular situation. In other words - 'the community' is mobilised very differently under different conditions.

These views present the distinction that community can be thought of firstly as a set of values, or an ideal that people aspire to in the abstract sense; or secondly as a specific descriptive category or set of variables (Smith, 2001) that people are assigned to (or identify themselves with). Though Postill claims that community in the latter sense is of little analytical use, I will discuss how this cannot be dismissed in the context of local governance: community as a social category exists for practical purposes, people identify with and construct a sense of identity from it, and a sense of community accordingly potentially becomes a powerful organising ideal, a source of agency. The two interpretations of community can sometimes be surprisingly hard to keep apart as subsequent discussion shows (the normative or value laden concepts slip in all too easily), and as Amit and Rapport (2002) point out, it is hard to be specific even of community as a form of social category. The following section investigates how community, both as normative ideal and social category, potentially relates to mobilisation of social relations.

2.1.2.2 The territorial notion of community dismantled

Gusfield (1975) provides an apparently clear point of departure (in terms of community as category or something to belong to) when he proposes the term can be used territorially, meaning a neighbourhood or city, as Flora referred to it later, a ‘community of place’ (Flora, 1998); or relationally, concerned with the nature of human relationships without reference to location. McMillan and Chavis (1986) support this distinction in a seminal article outlining the basis for a psychological “sense of community”. They note the two uses are not mutually exclusive - to the contrary, their subsequent analysis gives the impression that territorial community cannot exist without the relational aspect. Recently, there has however been a trend to see community not so much as a dialectical relationship between geography and human relations, as to move away from a spatial reading of place and community entirely (Massey, 1991; Mohan & Stokke, 2000). An academic blog post illustrates how the shift in perspective is grounded in experience, particularly in the urban

context: “I can see a street from my bedroom window ... [b]ut I never walk down there, drive down there, or anything – to be honest, I couldn’t really care less about it. But Stansted Airport – 40 miles down the road – **is** local as far as I am concerned. I suspect local is defined by the individual and in the context of the issue or activity, which doesn’t sound too much like the great foundation to a community to me” (Briggs, n.d.). In similar vein, Smith (2001) points out that people do not necessarily have much to do with each other simply because they live near one another, proposing it is the nature of relationships between people that becomes a more significant aspect of community.

Wenger’s theory of “Communities of Practice” (Wenger, 1998) is most commonly used to frame community in a purely relational sense. The theory offers a dynamic conception of community where membership is defined by participation around a shared practice or interest rather than location or contract. In Wenger’s view people construct aspects of their identity in relation to these voluntary communities, which span across the boundaries of traditional forms of organisation or social structure. The approach none the less describes relatively bounded, cohesive social structures and their evolution, and so is criticised for assuming a hierarchy of skill and authority extending from core to periphery (Engeström, 2007). Wenger further conceptualises participation at the periphery of a group in terms of the core - members engage in “legitimate peripheral participation” (Wenger, 1998, p. 100) in order to ascend in social position relative to the centre. Engeström maintains this model does not accurately reflect the growing empirical understanding of emergent social organisation. He proposes the metaphor of Mycorrhizae instead: “the invisible organic texture underneath visible fungi...a symbiotic association between a fungus and the roots or rhizoids of a plant” (p. 10). The metaphor illustrates a system that is difficult to bound, where heterogenous participants form mutually beneficial, or even parasitic partnerships in absence of a fixed hierarchy or social structure. The ‘community,’ such as it is, becomes a

substrate that social interactions draw from, more than implying any sort of inherent social organisation or even latent structure.

While the shift in perspective toward communities of voluntary association can be argued to simply offer a more differentiated understanding of society, others attribute the change to the literal demise of community and the social structures that people traditionally found identity in (Putnam, 2001). Bauman (Bauman & Tester, 2001) takes an extreme view of what he terms the “disembedding” of individuals in postmodern society. In what he terms “liquid modernity”, the world “denies the so-called solidity that it once struggled assiduously to create and maintain” (Lee, 2005, p.66). In Bauman’s view, social structures are now in constant flux, leaving individuals adrift without solid reference to frame their identity. This in turn affects social values: “Transience has replaced durability at the top of the value table. What is valued today (by choice as much as by unchosen necessity) is the ability to be on the move, to travel light and at short notice. Power is measured by the speed with which responsibilities can be escaped.” (Bauman & Tester, 2001, p. 95). People accordingly respond to the crisis of identity with a shallow, individualistic materialism, creating what Bauman characterises as a commercial “market” for identity and belonging.

Castells (2000) in turn proposes we have entered a “networked society”, characterised by globalisation and a new technological paradigm - in particular referring to the internet which he refers to as the “backbone of a new culture” (p. 694). The change in perspective “requires reconceptualising many social processes and institutions as expressions of networks, moving away from conceptual frameworks organised around the notion of centers or hierarchies” (p. 696). Castells’ networked view shares with Bauman (Bauman & Tester, 2001) the notion that changes in society have resulted in a “crisis of the family and state”, an institutional void breaking up societies based on negotiated institutions in favour of value-founded communes as discussed by Wenger (1998). Through the lens of the

network, Castells (2007) discusses what he considers positive changes particularly in the way we communicate and assimilate information, but cautions in turn that networks, whether technological or otherwise, imply some degree of social shaping. In a social network the actors (considered nodes) do not have complete freedom, much as their individual contributions (Wellman, 2002b) collectively account for part of the structure. The network itself is programmed (Castells, 2007) so that it controls flows of information (Willcocks, 2004), or provides limited and potentially inequitable affordances (Wellman et al., 2003) for action, whether deliberately or inadvertently.

Both the perspectives of Castells (2000) and Bauman (Bauman & Tester, 2001) raise profound questions about the source of agency in a society where individuals are free to assemble a personalised sense of belonging - as Bauman would have it in a form of marketplace for identity, but one in which they have little role to define the options on offer. The 'source' of agency is essentially external, or at least ontologically distinct - the global corporations who own the networks in Castells' view. One might ask if the notion of 'local community' makes sense at all in the networked view. Amin (2004) proposes we think of locality instead as a forcing function where non-spatial relational or networked communities intersect, what he refers to as "politics of propinquity". In this sense community is interesting only because it becomes the (forced) meeting ground of potentially conflicting network interests.

2.1.2.3 Geographic community revisited

Gurstein (2010) is concerned with exactly these questions of agency when he outlines the theoretical basis for the field of Community Informatics. He is critical of self-directed nature of network participation - the notion that individuals assemble a form of personalised social structure through their participation in diverse networks where the network itself is the "primary ontological mover" (p. 84). Referring for example to

Wellman's "networked individualism" (Wellman, 2002b), Gurstein (2010) argues that the notion "highlights both the manner in which the network links into the individual in an unmediated fashion and the manner in which the individual both experiences and interacts with the dispersed and (from his/her perspective) centre-less network directly, rather than through the mediation of social groupings or other social constructs" (p. 78). He maintains that it is through "the building of and involvement in communities that individuals are able to conceive of and tentatively create alternatives to the fragmentation that comes through a total involvement in the networked individualism that is characteristic of the information society" (p. 14). In other words, Gurstein positions community as a site of resistance to external threats, particularly to the dominance of the individual through "centrally driven networks". Gurstein qualifies his use of the word community to mean "lived physical community", in other words having implied spatial connotations, much as he refers to both "physical and electronically-enabled" community (Gurstein, 2007) when proposing that community represents a "structurally oppositional" ontology to that of the network. He does qualify that communities are none the less emergent in their response to external forces rather than permanent or ever "fully realised."

One might argue that Gurstein's framing of community re-introduces the notion that community exhibits some form of "unity of will" (Tönnies, 1974) - albeit acknowledged as continuously negotiated rather than implicit. The community is approached as a source of collective action, though significantly steered by the individuals who choose to participate. There is also an implicit normative bias - that somehow collective action and the resistance of a community to network forces is for the greater good. I take up this point in Section 2.2 where local, Direct Democracy is proposed as the normative position for this evaluation of local governance. For now, one might argue that in the context of a geographic community, ideally, there is at least no 'external' profit motive, no corporate entity which affords itself inequitable influence by structuring the interactions that individuals are able

to have. Gurstein uses the example that geographic communities have been most successful at combating global network forces such as the Walmart shopping chain, where the non-local influence had been deemed locally undesirable (Gurstein et al., 2010).

A complementary understanding of community is invoked by Communitarianism (Etzioni, 1995), which proposes a normative realignment with shared values and institutions, emphasising the reciprocal responsibility that individuals have to the “common good” in order to sustain society. Proponents maintain this responsibility is essentially realised through forms of community - and, as Walzer (1990) writes, that “we are really, at bottom, creatures of community” (p. 13). Communitarianism is commonly positioned in opposition to liberal individualism, which Etzioni (1996) criticises for propagating the narrow, self interested goals of dominant minorities. One might in turn argue that communitarians propagate a normative image of community which overstates the extent to which there are in fact “communal values”, thereby constructing a figmentary entity which fails in our imagination when conflict inevitably occurs. Bauman comments on a conundrum at the heart of community that mirrors the dialectic of Communitarianism with liberal individualism: “There is a price to be paid for the privilege of 'being in a community' - and it is inoffensive or even invisible only as long as the community stays in the dream. The price is paid in the currency of freedom, variously called 'autonomy', 'right to self-assertion', 'right to be yourself'. What-ever you choose, you gain some and lose some. Missing community means missing security; gaining community, if it happens, would soon mean missing freedom” (Bauman, 2001, p. 4).

Proponents of both Community Informatics and Communitarianism find in community a powerful organising ideal, much as they recognise the fallacy of community in the purest sense. The challenge, implicit in the trade-off that Baumann points out, is that the substance of community as ideal is never a given, but is always subject to revision. Bound

with the struggle of the individual with the collective is a struggle over what the collective ideally stands for. Cohen (1985) argues that communities are best approached as 'communities of meaning'. More than just a hypothetical organising ideal, he proposes community plays a symbolic role as the target for a sense of belonging. "[T]he reality of community lies in its members' perception of the vitality of its culture. People construct community symbolically, making it a resource and repository of meaning, and a referent of their identity" (p. 118). To this extent, community becomes a self-imposed cultural category that involves the understanding that members both have something in common with one another, and that this in turn distinguishes them from other communities. Cohen admits that the boundary is not necessarily obvious, it "exists in the minds of the beholders" (p. 12). To follow from earlier arguments that locality is not sufficient for a 'sense of community' to develop, one might infer that members of a geographic community are likely to engage in a search for this symbolic boundary to the extent that they become personally invested in a community. "Each expression has its own symbols and markers of boundaries defining who is 'in communion' or 'in community', and who is not." (Smith, 2001). Amit (2002) proposes the 'idea' of community draws its emotional valence from 'actual social relations' that are realised through community - in other words, people experience community not just in the abstract, but through the social relations, shared experiences and histories which they develop in the context. "Community arises out of an interaction between the imagination of solidarity and its realisation through social relations and is invested both with powerful affect as well as contingency, and therefore with both consciousness and choice." (p.18)

2.1.2.4 Community as source of collective action in local governance

To return to the notion of community as a source of collective action - the discussion of community of place thus far has covered community as organising ideal; that members develop a sense of commitment or belonging; and how a shared sense of the meaning and

norms of a community emerges in the struggle of individual wills. One might however ask how community subsequently plays a role in supporting the move from shared understanding, or even collective goals, to collective governance action?

One possible approach to this question is the theory of social capital (Coleman, 1988). A frequently cited definition of social capital defines it as the "features of social organization, such as trust, norms, and networks that can improve the efficiency of society by facilitating coordinated actions" (Putnam, Leonardi, & Nanetti, 1994, p. 167). It operates at an interpersonal level, but a community where high levels of social capital are present is considered more likely to act collectively. However, just as the notion of financial capital lumps together a range of financial mechanisms, social capital itself unpacks to a number of types of relation (Coleman, 1988) - a feeling of indebtedness to individuals, friendship, trust, a sense of reciprocity, etc. Coleman further maintains that social capital is not typically fungible - any given form of social capital may be useful to facilitate specific actions, but not others. While the concept groups together relations that are significant to understanding dynamics within community, the challenge of employing social capital as an analytical concept in the context of governance is that it is too broad a notion. It is further likely that while some of these relations enable action, there are also negative relations that constrain collective action. Woolcock (2000) refined the concept by distinguishing between bridging capital between social groups, versus bonding capital within a group. From a local governance perspective, the potentially negative impacts of bonding capital are especially significant - closing boundaries between groups and leading to exactly the symptoms identified with insular localism.

While the theory of social capital suggests some of the types of relation that may predispose to (or against) collective governance action, it cannot tell us which relations will in practice be activated in a given situation. It also does not explain why some

apparently tightly knit communities do not act collectively in their own political interest. One likely factor has variously been referred to as a sense of agency (Bandura, 1999) or empowerment (Zimmerman, 1995), the sense that individual or collective actions will have desired results. While it is not in the scope of this research to debate models of agency in detail, I briefly clarify the basis of my own use of the concept in view of the socially constructionist approach this study takes.

Social cognitive theory (Bandura, 1999) provides a model for individual and also collective agency that acknowledges a degree of social shaping to behaviour, but also assigns individuals the ability to act beyond given social values and knowledge constructions. According to this theory, people have inherited beliefs through which they filter experience and resulting options for reaction, but they also have the ability to introspect these beliefs contextually, and this impacts their ability to act with a degree of agency. In this sense, the theory provides a theoretical basis for Gurstein's claim that community provides an alternative collective influence on beliefs, as well as a context within which individuals can introspect on social 'givens'. In social cognitive theory, Bandura particularly emphasises the role of perceived self-efficacy, defined as people's beliefs about their ability to act competently in a particular context and so exercise influence over events that affect their lives.

Can one argue that individuals gain a degree of self-efficacy through community? Zimmerman (1995) uses the term "psychological empowerment" to refer to empowerment at the level of the individual. It integrates perceptions of personal control, a proactive approach to life and a critical understanding of the socio-political environment that has many similarities with Bandura's notion of self-efficacy. Zimmerman and Rappoport (1988) suggest that civic participation leads to a sense of psychological empowerment – empowerment is not a static personality trait, but rather a dynamic, contextually driven

construct (Zimmerman, 1995). Anderson (2010) further extends the notion to “political efficacy” in the context of governance, and like Bandura proposes efficacy operates at both individual and group level. In other words, while individuals may participate in governance out of a personal sense of efficacy, a collective sense of empowerment or efficacy also develops. Bandura proposes that perceived collective efficacy is in fact an emergent group-level property that is more than sum of individual perceptions. While relatively few individuals may believe that “I can” (resolve an issue), there may be a strong sense that “we can.” Where collective governance action has visible outcomes, this reinforces the sense of political efficacy both at collective and individual level.

2.1.3 Summary - local governance

This section provides the basis not only for the analysis of local governance interactions, but also supports the subsequent discussion of the ideal of direct deliberative democracy and the potential role of socio technical systems in approaching the ideal. I discussed two key notions central to the case: local governance as opposed to for example regional government, the process being investigated; and community of place, the context. I also considered what localness and a sense community implies for the potential for collective governance action.

I considered that a shift from government to governance has resulted not so much from top down policy, as it is the outcome of wide reaching changes in the social environment which are unlikely to be reversed (Andrew & Goldsmith, 1998). With this shift has come a re-emphasis on localism, or decentralised governance. There are compelling benefits to local governance (Cohen & Sabel, 1997; Pratchett, 2004) – the most significant to this study is that residents are both more likely to become engaged, and also to be well informed about issues. There is however the risk that localism becomes inward facing, and that the local governance process is abused to unfairly command resources (Cashin, 1999).

While Section 2.2 goes some way to discussing potential mechanisms to mitigate the limitations of local governance (Cohen & Sabel, 1997), it will be interesting to see how these opportunities and limitations become evident in the study. Mohan and Stokke (2000, p. 265) also argue that local governance is employed as a solution where representative government is not meeting its obligation. While this may be the case, from a theoretical perspective, I rephrase Andrew (1998) that ideally the local democratic polity operates *as a complement to* local representative government, in which local politics are a means of making collective decisions while building a sense of local identity, reciprocity and shared responsibility.

The reference to local identity raises questions in light of recent thinking on locality, which increasingly favours a relational view of place - just because residents share locality, it does not follow that they have much in common (Mohan & Stokke, 2000, p. 265). I contend that geographical locality remains a relevant site of study because, in practice, important governance actions occur at the local level, made all the more interesting by competing local values and interests. While it is not the central focus of this research to defend the relevance of the geographically local, it has proved interesting to examine to what extent this claim can be substantiated. The notion of local identity also closely relates to the discussion of community - a central concept in this research. This study takes a view from the account of literature that 'community' can be thought to refer to a set of values, but also to a social category of some sort - much as the two are often conflated. Further, community as category might be expressed territorially, referring to geographic or local community; or relationally, referring to for example Wenger's (1998) communities of practice, or the networked structures described by Castells (2007). Given the geographic focus of this study, it is worth noting that geographic community necessarily encompasses any number of relational communities (McMillan & Chavis, 1986).

More than merely a forcing function for the intersection of relational communities (Amin, 2004) - Communitarians (Etzioni, 1995), as well as the field of Community Informatics (Gurstein et al., 2010) consider geographic community to be a powerful organising ideal. For Communitarians this is closely associated with a normative position - acting for the greater good rather than individual interest. Within Community Informatics, community is framed as a source of identity, agency and hence resistance to network domination. The notion gains its emotional valence from both the identity people have invested, and the social relations that people experience community through (Amit, 2002). However, as Cohen (1985a) points out, this 'organising ideal' is anything but given - community is something individually imagined, and as such a site of struggle between individual liberty and the collective, the constant redefining of symbolic boundaries and shared meaning. In this light, conflict within a community must be considered unavoidable, rather than dismissed out of hand as a failure of the folk ideal. This constructs community that, as Gurstein et al (2010) propose, is bound in place, yet at the same time relational in nature, recreating itself, never fully realised nor permanent. While academically it seems obvious to be alert to and be critical of the idealised values that are associated with community in its purest sense, the normative views proposed by Etzioni (1996) for example, are shared by many people who actively participate to construct community. It is also this notion of community that people have as an ideal when they construct a personal "imagined community" (Anderson, 1991; Cohen, 1985) of where they live.

This research does not privilege one conception of community over another - each potentially points to aspects of community relevant to a contextually sensitive study. It does however resist approaching community as a normative "good" of itself, rather framing community as a context where competing values exist - even for what community ought to be. Community becomes relevant to local governance to the extent that it does present a forcing function for the competing interests of relational social structures; to the

extent that it highlights the conflict of individual interests with some form of collective will; and to the extent that it frames the struggle to construct shared meaning - a negotiated value position from which collective action can be taken. It directly impacts the potential for local civic engagement and action through the sense of collective agency or empowerment that participants are able to maintain as a result of belonging to a community.

2.2 Theories of democracy

2.2.1 Democracy

The previous section discussed theory relating to the social process being investigated (local governance), as well as the context, or social organisation proposed of the context (community). While the notion of community as I have proposed entails particular dynamics of social organisation, as well as some of the values driving interaction, these are not sufficient to evaluate a process of governance. What sort of process is required, and how do we judge one set of conditions more appropriate or desirable than another for the purpose of civic decision making? I propose to draw on the discourse of democracy to present the normative basis for evaluation - because it is a field of knowledge that has struggled with exactly these issues in diverse contexts. The analysis is structured in reference to a conceptualisation of democracy that appears well suited to local governance, that of direct deliberative democracy (DDD) (Cohen & Sabel, 1997). In the following section I discuss and qualify my use of each of the constituent terms of the phrase. There are different interpretations of democracy, and underlying dimensions to 'directness' or 'deliberation,' that have a bearing on the research objective.

2.2.1.1 Democratic fundamentals

Cohen and Sabel (1997, p. 4) define democracy as “a political ideal that applies in the first instance to arrangements for making binding collective decisions.” They further qualify the definition, stating that arrangements are democratic to the extent that “they ensure that the authorisation to exercise public power - and that exercise itself - arises from collective decisions by the citizens over whom that power is exercised”(ibid.). In other words, democracy attempts to provide a normative framework to establish the legitimacy of collective decisions and the public exercise of power. Informally one might say democratic governance implements some variant of the fundamental democratic principle of “rule by the people” (Dahl, 1991, p.83, p.97). Dahl proposes that this principle follows from two fundamental values: intrinsic equality – that all are equally fit to contribute to decisions that affect the general welfare; and personal autonomy – that all have the right to be self determining, in other words to contribute to decisions that affect them to the maximum extent possible.

My earlier discussion of liberal individualism versus communitarism (as orientations to community) touched on one of the fundamental discourses of democratic theory: what Habermas (1997) referred to as “[t]he dialectic between liberalism and radical democracy”. Habermas summarises questions within the discourse of democracy which just as effectively distil the tension implicit within community: “[t]he dispute has to do with how one can reconcile equality with liberty, unity with diversity, or the right of the majority with the right of the minority” (p.44). Habermas presents the resulting positions within the debate as follows:

“Liberals begin with the legal institutionalization of equal liberties, conceiving these as rights held by individual subjects. In their view, human rights enjoy normative priority over democracy, and the constitutional separation of powers has priority over the will of

the democratic legislature. Advocates of egalitarianism, on the other hand, conceive the collective practice of free and equal persons as sovereign will-formation. They understand human rights as an expression of the sovereign will of the people, and the constitutional separation of powers emerges from the enlightened will of the democratic legislature.”

(p.44)

While discussing the details and nuances of these two positions goes beyond the scope of this thesis, it is worth noting that variants of this discourse are expressed in politics the world over - one might for example argue that it underlies the Democrat-Republican positions in the United States. Bauman (2001a) captures similar divisions when he contrasts the advantages of belonging to community with the potential for the same association to become oppressive. Cashin (1999) argues along similar lines when she posits that unconstrained local governance allows well resourced individuals or neighbourhoods (the “favoured quarter”) to unfairly monopolise public goods - in contrast to what she considers more egalitarian regional structures of government.

Bohman and Rehg (1997) position Dahl’s pluralist vision of democracy within the liberal tradition. However, for the purpose of this thesis, the principles of intrinsic equality and personal autonomy that Dahl proposes (Dahl, 1991) capture (and in combination potentially reconcile) the fundamental statement of each side of the argument. At the level of community, the balance of the two positions is realised as a tension between the will of the individual and that of the majority, and between some sense of unified community versus the plural values and motives of the parts thereof. This is a conflict that one cannot realistically expect to permanently resolve, but rather that ideally results in continuous, hopefully fair negotiation. The challenge then is to devise mechanisms to reconcile plural individual wills to some form of constructive, collective action.

2.2.1.2 Direct participation

Related to the process of collective decision making, there is long standing debate as to whether the objectives of democracy are best served in systems where people contribute to decisions directly, referred to as *direct democracy*, or in systems where an elected government and its officials conduct the business of governance, referred to as *representative democracy*. ‘Direct’ and ‘representative democracy’ are frequently positioned as opposing practices within democratic theory (Gutmann & Thompson, 2004). Authors refer back to the Athenian democracy in the 5th century BC as the earliest written record of direct or ‘pure’ democracy (Manin, 1997) - though it is worth pointing out that even at the scale of the city state of Athens, direct democracy in practice involved representative mechanisms such as the drawing of lots to appoint speaking turns. In view of this, given the size and complexity of the modern nation state, Dahl (1991) proposes that large scale direct participation is no longer realistic. Citizens have limited time to be involved, and do not have the specialist skills or expertise provided by a representative administration. However, as Manin (1997) points out, in reality the binary opposition of direct and representative democracy is artificial, since neither implies an absolute form and the practical implementation of ‘directness’ has multiple dimensions - as the Athenian example indicates. The complex reality of participative decision-making quickly dispels notions of an ideal process (Saward, 2000), and there are compelling arguments for both direct and representative forms of decision-making depending on context. Barber (2003), a strong proponent of direct democracy, proposes the intention is not so much to replace representative with what he calls “strong democracy”, but to “thicken thin democracy with a critical overlay of participatory institutions” (p. xvi). In Barber’s view, citizens have the right to be directly involved in the decisions that most directly influence their lives.

In a literature review of participative governance, Roberts (2004) concludes that as “democratic societies become more decentralised, interdependent, networked [and] linked

by new information technologies” (p. 1), direct citizen involvement has been on the increase since the mid twentieth century. This research accordingly focuses on direct governance as simultaneously the outcome of, and the driver for implementing, information technology in the local context. I approach the notion of directness with the understanding that, while it is implicitly desirable in some contexts, it does not exclude, or necessarily oppose, representative mechanisms of governance.

2.2.1.3 Deliberativeness

As a final point of definition – the introductory paragraph of Section 2.2 refers to direct deliberative democracy. Bohman (1998) provides an idealised characterisation of deliberative democracy: that legitimate, broadly acceptable decisions are the result of a process organised around the ideal of political justification, and which requires free public reasoning of equal citizens. Habermas referred to this process as the shaping of policy by "the force of better argument" (Habermas, 1987, p.24). In principle then, all forms of democratic governance are deliberative to the extent that they rely on reasoned evidence to support choices – much as their mechanisms may be more or less participatory, and more or less transparent. Saward (2000) points to the pitfalls of uncritically advocating deliberative decision making, where proponents in his view too often compare deliberative democracy in its idealised form against the real world implementation of its alternatives. Specifically, aggregative mechanisms such as voting remain necessary where a decision cannot be reached by deliberation alone. Gutmann and Thompson (2004), acknowledging such limitations, in turn propose that the core value of deliberation lies in the ‘reason giving’. Decisions based on reasons (which have been made broadly accessible), rather than simply based on a position, are more open to be engaged and evaluated against their justification. Hauser (1998) similarly offers the opinion that “deciding public policy through argument has little to recommend it in terms of efficiency, the purpose of deliberation...is not efficient government but educated judgement" (p. 2).

2.2.1.4 direct deliberative democracy

Cohen (1997; 2004) is a strong advocate of direct deliberative democracy at local scale. In an often referenced paper, Cohen and Sabel (1997) propose two advantages: that it directly solves problems where civic governance presently appears to fail; and that, as a form of collective decision making through direct participation, it is desirable in its own right. Attempting to address the limitations of top down constitutional democracy, while at the same time avoiding the problems inherent in localism, they suggest that: “[b]ecause of the numerosity and diversity of sites, we want a structure of decision-making that does not require uniform solutions ... because of the complexity of problems, we want a structure that fosters inter-local comparisons of solutions" (Cohen and Sabel, 1997, p.16). Cohen and Sabel advocate a form of local governance where “citizens of equal standing” bring diverse viewpoints, experience and dispositions to an issue - informed by their proximity to the problem, and motivated by the direct impact that any outcome will presumably have on them. Deliberation is further constructed between citizens in the first place, rather than as a discourse between government and civil society, which Cohen and Sabel suggest is constrained by an inherent imbalance of power.

Cohen and Sabel however admit to criticisms of direct deliberative democracy - including of the deliberative process itself - which some argue simply creates new forms of exclusion or imbalances of power. Rational deliberation requires particular sorts of skill, and admits certain forms of argument over others. Before I consider this and other key criticisms of the direct deliberative model directly, the following section discusses the deliberative process itself in more detail to provide a more nuanced understanding of civic deliberation.

2.2.2 Aspects of deliberation

2.2.2.1 Deliberation beyond decision-making

Gutmann and Thompson (2004) reflect on multiple dimensions of the process of deliberation - salient to this discussion they characterise deliberation as either instrumental or expressive; as consensual or pluralist.

An instrumental view proposes "political deliberation has no value in itself, beyond enabling citizens to make justifiable political decisions" (Gutmann and Thompson, 2004, p. 22). Many definitions of deliberation, reflected e.g. in Pingree's (2009) recent aggregation of prominent definitions, are implicitly instrumental when they suggest the goal of deliberative exchange is to "make sound decisions." This echoes the definition of democracy itself that I cited earlier (Cohen & Sabel, 1997). In other words, deliberation that relates to local governance would only have value to the extent that it contributes directly to problem solving, decision-making and co-ordinating action. An expressive view in turn considers deliberation intrinsically valuable "as a manifestation of mutual respect among citizens" (Gutmann & Thompson, 2004, p. 21). Gutmann and Thompson here cite Sunstein's use of 'expressive' (Sunstein, 1995): to 'make a statement' about the norms or underlying social meaning of an issue or deliberation, rather than attempting to control the outcomes directly. For the purpose of this study, I take direction from Gutmann and Thompson (2004) who consider that the two values - of dialogue as instrumental or expressive - are not incompatible and suggest any adequate theory of deliberation must recognise both.

The discussion of deliberation as instrumental or expressive is linked to the question of deliberation as an ideally consensual or pluralist process. In other words, "should deliberation aim at achieving consensus through realising a common good, or through

seeking the fairest terms of living with a recalcitrant pluralism?" (Gutmann & Thompson, 2004, p. 26). One might argue that an aggregative process, e.g. a vote between opposing positions, implies decision making driven by process where consensus is imposed rather than genuine. One party wins and all others lose, presumably for the highest common good. The likes of Habermas and Cohen instead envision deliberation that finds substantive consensus through the "force of the better argument" (Cohen, 1997; Habermas, 1985; Klein & Huynh, 2004). As discussed earlier, Saward (2000) makes valid criticism of this ideal: deliberation none the less falls back on aggregative mechanisms to allow decisions to be made because participants cannot agree otherwise. Deliberation rarely 'produces' consensus. The process of deliberation might however exactly move away from establishing mutually exclusive "positions" on an issue (Kahane & Senge, 2007), a 'for' and an 'against' faction for example, and then failing to reconcile them. Assuming pluralism is unavoidable and not inherently undesirable, deliberation might instead focus on the underlying interests of stakeholders - and particularly the means of finding fair and mutually beneficial solutions.

An important understanding of the notion of deliberation then, is that it can be more than a mechanism for deciding between pre-determined outcomes. In the process of deliberation norms are shaped and social meaning "created", new options and potential outcomes generated which may not have been acknowledged before (Hauser, 1998, p. 86). Beyond simply denoting the absence of overt domination, deliberative democracy ideally affords the opportunity to generate social meaning, and as a result define new options for action. Arendt (Arendt, 1960) refers to this as the "freedom to", as opposed to purely having "freedom from". This has much in common with Gurstein's (2010) view on community discussed earlier - a space to generate alternative social 'facts' to those offered e.g. by business corporations or commercial interest. More broadly it relates to what Habermas refers to as the "public sphere", the deliberative space "in which something approaching

public opinion can be formed” (Habermas, Lennox, & Lennox, 1974, p. 49). However, while Habermas considers the public sphere as a space ‘between’ the institutions of government and civil society, the framing of governance that this thesis adopts suggests a broader view - of the public sphere as an expressive space existing first and foremost between citizens. Hauser (1998, p. 86) similarly emphasises that public opinion is located in "the dialog of informal discourse," what he refers to as "vernacular rhetoric" rather than idealised "rational deliberation".

2.2.2.2 Critical social theory and communicative action

The work of Habermas has been referenced several times in the discussion thus far - as it very often is in critical IS study (Mingers, 2001). Habermas’ Theory of Communicative Action (Habermas, 1987) attempts to provide the theoretical basis for deliberation that seeks ‘mutually beneficial’ solutions. Habermas’ theory is founded on the notion of ‘communicative reason’: that rational actions are grounded on knowledge, which provides reasons for what one does; and that communication is subsequently used to reach shared understanding as participants, “relating to a world, reciprocally raise validity claims that can be contested or validated” (Klein & Huynh, 2004, p. 180). His central project is the emancipatory reconstruction of society through such rational discourse, which would over time reveal and establish the ideal courses of action by the “force of the better argument.”

The Theory of Communicative Action distinguishes between “success orientated” (teleological) and “agreement orientated” (communicative) social actions (Habermas, 1987). These are grounded on what Habermas views as two fundamental human tendencies – to strive for success through the command of resources and power; and to want to arrive at mutual understandings and co-ordination through partnership. Habermas develops a more detailed topology: ‘Instrumental Actions’ and ‘Strategic Actions’ are considered success orientated - an actor pursuing their own ends treating others as mere objects. Two

forms of 'Communicative Action' in turn are concerned with achieving and maintaining common/mutual understanding - 'Dramaturgical Actions' involve the presentation of oneself to an audience; while 'Discursive Actions' involve actors in a cooperative search for a shared understanding or 'truth.' Discursive actions are at the heart of Habermas' ideal of societal emancipation. Actors justify their own claims by providing reasoned evidence, and clarify the content of others' messages to establish a shared understanding of goals and ideal courses of action.

Mingers (2001, p. 244) makes the point that Habermas analyses communicative action "not abstractly in terms of syntax or semantics, but as real, purposeful, pragmatic interaction between social subjects". While likely any given action may simultaneously fall within multiple categories, by its focus on the character rather than content of interactions, Habermas' typology of social actions (Habermas, 1985; Klein & Huynh, 2004) helps to appreciate at what level people are interacting and points to aspects of social mediating technologies that are more or less effective at supporting particular discursive goals.

Habermas' concept of 'lifeworld' suggests an important precondition for discursive action: Members of a group have access to a history of 'shared lived experience' that forms the implicit background to their communication. Lifeworld denotes the "stock of meanings and values that can be derived from these experiences" (Klein & Huynh, 2004) – considered both as a personal resource for forming attitudes and preferences, but also the means for imparting these meanings to others. It is the basis for reaching the new shared understanding proposed of 'discursive action'. Habermas proposes that the lifeworld is most concrete in small, tightly knit groups of friends and family, while in society at large it is more diffuse or abstractly expressed as a general shared history and national culture. Socio-political formations such as political parties or interest groups form an important intermediate source of shared experiences. While Klein and Huynh (2004) question the

ontological status of the lifeworld as distinct from the subjective world, the concept highlights an important potential dimension of constructive discourse: That dialogue must begin at the level where there is sufficient shared understanding, and that the generality of shared understanding may vary contextually. In smaller groups with substantial shared history, for example a geographically defined 'community', there is likely to be significant shared meaning. To have aspects of a lifeworld in common of course does not imply agreement or harmony, as anyone who has lived in a small community will immediately recognise.

Habermas had a particular concern that what he perceived as the teleological or instrumental macro systems of government (public system and administrative power) and economy (markets and money), what he called 'the system', would overpower or 'colonise' the lifeworld. While this framing questionably disembodies government, in the context of IS it raises the useful question of whether the combined effect of spreading technological (e.g. web based) systems would be social integration, to create "more opportunities for authentic communication", or that of predominantly supporting more instrumental systems or forms of action (Klein & Huynh, 2004).

The Theory of Communicative Action is not without critics: In the context of information systems, Sharrock and Button (1997) suggest that Habermas' sociological theory is too abstract and not sufficiently grounded in observed practice to be the basis of information systems research. In their view it lent to developing "a deceptively simple impression" of a system and further, in articulating a path to deliberative democracy, Habermas had introduced notions of 'idealised' actions that characterised the way in which people should argue and debate. This criticism is however as much of the overly simplistic implementation of the theory by practitioners in information systems, as of the theory

itself. None the less, the comments share their roots with criticism of Habermas' theory within the discourse of critical social theory.

Gadamer's hermeneutic philosophy questions (in Klein & Huynh, 2004) how Habermas' idealised discourse might overcome the "prison of our traditions" – the pre-understanding, or cultural and historical background which participants do not necessarily share, but import into discourse. Within the ranks of critical social theorists, Foucault is however perhaps the most prominent critic. Foucault does not take the cultural background as a given, but rather sees in it the role of power as a dynamic force. Foucault contends that Habermas idealistically ignores the "invisible regimes of truth" – the role of power relationships in shaping what is considered valid and true in any discourse (Flyvbjerg, 1998). In other words, while we have the ability to question social 'givens', relations of power actively continue to shape what is considered true, and what questions are asked. Foucault's main concern is with the way in which power linked inextricably with knowledge - they are not considered equitable, but directly imply one another - "there is no power relation without the correlative institution of a field of knowledge, nor any knowledge that does not presuppose and constitute power relations" (Foucault, 1979a, p. 27). What is accepted as true or normal arises out of historical contingency, power relations and political ideologies that determine fact and possibilities for action. To be clear, Foucault does not view power as something that is 'owned', but rather that is expressed bottom up through social relations - and which in the context of governance may have both positive and negative impacts (Willcocks, 2006). Power is a resource to action much as it can become oppressive of others.

Foucault is criticised in turn for his conception of power that is ever present and everywhere - which some take to mean that "then all social and cultural phenomena are reducible to power relations" (Willcocks, 2004, p. 263). In Willcocks' view, power

becomes an "all encompassing, somewhat blunt, repetitive instrument for explaining social phenomena." (p.262) Willcocks goes on to propose that the notion of agency suffers as a result of the ontological focus on power - Foucault's theory is unable to account for what it is that resists power. He also quotes Habermas' direct response to Foucault - in essence that Foucault is unable to offer an alternative normative 'framework' and so provides no route to address a more equitable distribution of power in governance.

Rather than dismissing the theory of either Habermas or Foucault, the tension between their work provides a potentially productive perspective to better understand online deliberation. Klein and Huynh (2004) suggest Habermas' critical social theory provides a useful starting point from which to relate to other forms of critical social analysis. His framework further offers a pragmatic lens through which to make sense of communicative interactions - exactly because it offers an idealised, normative model of interaction - though this is not to say that deliberation must realistically conform to the ideal, nor the model imposed on research in isolation. Foucault in turn provides both a reality check and alternative lines of enquiry: how might changes in the deliberative environment reflect the balance of power, and particularly the expression of power as either empowering or oppressive force? Given a process of 'communicative action' in Habermasian terms, where participants share aspects of a lifeworld, what opportunities does the communicative process include to challenge the givens, to question what is presumed fact and what fallacy, and ultimately to look beyond what is on the table to discuss in the first place?

2.2.2.3 A compound understanding of deliberation

In summary, deliberation can have instrumental purpose, but also potentially has significant expressive value by helping participants establish common ground or a shared field of experience, if not necessarily agreement. As such, it is a form of social interaction that has effects beyond the content or issue under deliberation. While some would criticise

deliberation for its inability to generate consensus, one might argue it is all the more important given unavoidable pluralism in society. Rather than imposing the will of a (potentially marginal) majority on others, an ideal process attempts in the first place to find mutually beneficial solutions. An important aspect of this process is to question “what is on the table”: the options presented as exclusive positions to serve the needs of aggregative decision making. This highlights the generative potential of deliberation. The role of creating knowledge or truth is itself somewhat democratised.

Habermas provides a model of deliberation that is similarly concerned with the generative role of communication - albeit committed to rational argument as its highest form. The Theory of Communicative Action acknowledges that deliberation can be individually motivated (whether expressive or instrumental), and can seek to influence or coerce others. It may further be ‘dramaturgical’ - as much concerned with self presentation (a discursive goal in its own right) as substantive discussion. In Habermas’ view people however also have a genuine desire for social harmony, to find mutually beneficial solutions and to construct a shared ‘lifeworld’. This position finds strong echoes in the writing of Cohen (1985a) on community - that people construct a sense of belonging which they become significantly invested in, and subsequently engage others in the shared imagining of their ‘meaning’ of a community - if only to reduce their personal sense of dissonance.

Habermas’ theory accommodates that these dimensions are simultaneously present in any given act of deliberation. While there is strong criticism of the implied potential for ‘rational agreement’, one might argue that even where disagreement is inevitable and enduring, deliberation helps to construct a shared frame of reference when participants are exposed to the views of others.

Finally, Foucault sensitises the discussion to a conundrum: if power determines what is considered true, how can ‘the force of better argument’ address an imbalance of power?

Foucault provides no answer to the question. In practice neither the force of better argument, nor the mechanisms of power have absolute sway. For the purpose of this study, the balance of the two approaches presents a potentially productive perspective on the process of deliberation, and the influence which communication technology might subsequently have on local deliberative governance.

2.2.3 Critical challenges to direct deliberative democracy

While direct deliberative democracy offers an appealing model of governance, this next section confronts four challenges that are frequently raised. As I outlined in the introduction, these are the difficulty of coordinating direct participation (Dahl, 1991), the expertise required of participants (Gutmann & Thompson, 2004), the often underestimated dynamics of power in deliberation (Lukes, 1974), and that deliberation is not necessarily the sole, ideal mode of participation (Saward, 2000). While no doubt other criticisms have been made, these four are most prominent in academic analysis of deliberative democracy (Coleman & Blumler, 2009; Dahl, 1991; Gutmann & Thompson, 2004; Vedel, 2006).

Dahl (1991) discusses that large-scale direct participation is not realistic considering the size and complexity of the modern nation state. Citizens have limited time to be involved, and do not have the specialist skills or expertise provided by a representative administration. In fact, Dahl proposes that representative forms of decision-making evolved in part to overcome these two challenges. Gutmann and Thompson (2004) similarly consider both practical and ethical concerns with direct forms of *deliberative* democracy. Particularly targeted at the national level, they essentially recast the objections raised by Dahl in terms of deliberative process: It is not practical to include everyone in deliberation, and the public are not all skilled (equal) deliberators – they may not give the best reasons, nor make the most astute decisions. Authors further question the accessibility of deliberation as a political process, where public opinion is largely formed in a “media

space” (Castells, 2007) that is not equally accessible to all. One might argue that, in the local decision making context targeted by this thesis, these criticisms are somewhat mitigated. The knowledge and commitment of participants is harder to question where they are most familiar with the contingency of local situations, and also most directly affected (Cohen & Sabel, 1997). The number of potential participants in any given decision is also significantly lower and channels of communication more likely accessible.

Related to the role of power in direct deliberative democracy, Foucault notably criticised the ideal of dialogue “that circulates freely without coercion or distortion,” as utopian (Flyvbjerg, 1998; Willcocks, 2004). Though the comments were most directly addressed at Habermas’ notion of communicative action (Klein & Huynh, 2004), Foucault’s point was essentially that power strongly influences what is considered true, and so that dialogue is inextricably linked to power. Though fundamentally supportive of deliberative democracy, Gutmann and Thompson (2004) acknowledge that deliberation can be used cynically, as a cover for power politics. They propose however that in such instances, the “giving of reasons” is its own best defence. Even in absence of overt conflict or coercion, power might however control the agenda - by determining what is “on the table” for discussion, or more subtly by framing what role players consider in their interest (Lukes, 1974). While misuse of power to control most often implicates institutions of government, Saward (2006) proposes that where citizens participate directly there are no less “claims of representation.” In other words, participants claim to represent the interests of a constituency they effectively “create” to support their argument. I cite these notions not to suggest that direct deliberative governance is more sensitive to the effects of power than for example representative democracy, they do however point to potential dynamics that cannot be ignored in a grounded analysis.

The fourth criticism is not so much that people do not have the ability, but that proponents discriminate against preferences that are not stated deliberatively (Saward, 2000) by proposing that only deliberative claims are legitimate. Cohen (1997) acknowledges that deliberation typically relies on a particular discursive style - formal, rational, deductive and generalised – and so potentially excludes people who have a different style of communication (e.g. emotive or narrative) and also the information conveyed by these styles. Saward argues more broadly that deliberation is democratically secondary, a component in the larger process of enacting democratic governance. He points out that deliberative process typically relies on aggregative mechanisms such as a vote as soon as there is not perfect consensus. I agree that deliberation has shortcomings as a sole mode of participation, and that a much broader range of acts do (and should) contribute to the process of civic governance.

Cohen and Sabel (1997) propose that the local context affords less formal, more inclusive forms of interaction. While purist arguments consider deliberative democracy solely a form of dialogue, participants might for example contribute to an outcome by their mere presence, by providing an audience and non-verbally showing support for a motion. Where citizens become direct actors in the governance process - rather than being confined to indirect participation through debate over policy - there are a range of substantive contributions that they might make. Furthermore, where a small number of people directly cooperate to solve a local community issue, deliberation may in reality be nearer to Hauser's "vernacular rhetoric" (Hauser, 1998) than Habermas' ideal "force of better argument" (Habermas, 1997).

2.2.4 Summary - theories of democracy

To summarise, the notion of direct deliberative democracy appears well suited as a normative framework to evaluate local governance. In the discussion, I considered each of the component terms and what they potentially contribute to the overall framing of this research.

The fundamental democratic principles of ‘intrinsic equality’ and ‘personal autonomy’ (Dahl, 1991) present pragmatic tools to evaluate governance processes: to what extent are all equally able to contribute to decisions, and are individuals’ right to self determination respected to the maximum extent possible? “Directness” in turn implies an implementation of democracy (particularly at local scale) where “citizens of equal standing” bring diverse viewpoints, experience and dispositions to an issue - informed by their proximity to the problem, and motivated by the direct impact that outcomes will presumably have on them. (Cohen & Sabel, 1997) While “Deliberation” is more commonly associated with formal policy debate, this framing of democracy proposes a deliberative process that admits a broad range of citizen-to-citizen interactions, targeted at tackling local issues directly, rather purely through engagement with government policy. The direct deliberative process, as it has been framed in the discussion, locates its ‘publics’ in the vernacular rhetoric (Hauser, 1998) of a local forum rather than any formally sanctioned debate. This does not discount the importance or impact of formal government - nor of policy dialogue for that matter. Instead I simply choose to focus on a scope and approach to governance that offers an important complement to these and which is often underprivileged in research.

The theoretical framing further considers that in addition to instrumental value, deliberation at the local scale may have significant expressive purpose - and that accordingly its value may lie exactly in supporting pluralism, rather than necessarily

forming consensus (Gutmann & Thompson, 2004). While technology is discussed in more detail in the following section, it would appear that where this understanding is applied to a governance related email list or online forum, an instrumental view of its purpose predisposes to an instrumental view of technology - as a 'tool' primarily to reduce the coordinative overheads associated with direct deliberative decision-making, and potentially to assist in the process of forming consensus (Bertucci, 2008). The expressive view instead encourages the researcher to consider the extent to which technology fulfils a broader social function by extending the public sphere (Castells, 2007; Dahlberg, 2001a), by for example creating a space where meanings can be contested.

Habermas' Theory of Communicative Action suggests that, while actions in the public sphere might be instrumental, or otherwise motivated by an individual need to present a public appearance - there is plausible argument that people also have interest in shaping some sort of public good, often associated with the community they construct a sense of belonging to (Cohen, 1985). The work of Foucault (Foucault, 1979b; Willcocks, 2006) proposes a critical view of local deliberative process all the same - to the extent that there are inequitable power relations present in a community, these are likely to be expressed as a means to control what is on the table for discussion, what is considered plausible, normatively acceptable or true.

A further key aspect in the work of a range of scholars I have cited (Arendt, 1960; Cohen & Sabel, 1997; Gurstein et al., 2010; Habermas, 1997) is the notion that deliberative governance is potentially generative - in other words that democratic fundamentals are implemented to afford people the *freedom to* create a social reality, rather than purely the *freedom from* domination. The discussion has outlined that the notion of direct deliberative democracy is not without critics - each of the four main challenges I outlined however suggest key areas where the implementation of online technology might have an impact on

deliberative governance (for better or worse). There is further some cause to think that in the local context, there is a degree of natural mitigation of challenges relating to imbalance of power, expertise required and logistical complication.

2.3 The role of technology

2.3.1 Early approaches

In the previous section, I argued that democratic local governance can be conceptualised as a co-constructive process (Hauser, 1998) - the shared defining of social reality and the possibilities for action therein - rather than being purely concerned with deciding between pre-existing options by a vote or poll (Cohen & Sabel, 1997). This section considers how one might approach the role of technology given this framing of governance. The discussion is somewhat directed towards what I earlier referred to as 'social media'. Shirky (2003) uses the term synonymously with 'social software' to mean simply "software that supports group interaction" rather than referring to any particular technology. Accordingly, though this research makes a case study of email discussion lists, it is conceptually framed to be relevant to a broad family of solutions that support communication via the internet - whether for example by browser interface or email.

2.3.1.1 Media richness theory

A common thread in early studies of online communication was 'media richness theory' (Daft & Lengel, 1986), which rates media according to the richness of communication supported, typically comparing online communication with television or face-to-face interaction. While this is a tempting format for research relating to web enabled governance, more recent work is critical of the approach: "from an interpretive perspective ... richness is not an invariant property of a communication medium, but an emergent property of the interaction between the communication medium and its organisational

context." (Lee, 1994, p. 1) Ngwenyama and Lee (1997) make a detailed review of research relating to 'media richness theory', as well as criticisms of the theory from both positivist and interpretive perspectives. They conclude from their review that media themselves are not the determining factor for the "richness" of communication - that humans imbue social meanings and constraints to even very "lean" forms of communication.

Markus (1994) similarly criticises media richness theory for being technologically deterministic. Following an investigation of the email interactions within a large company, she proposes two alternative perspectives that should both be considered when examining technology impact: first, that the intentions of users determine some outcomes; and second, that other outcomes are unpredictable in spite of appropriate technology and users' positive intentions. In support of the first position she draws on a "rational actor perspective" (p.123) after the work of Kling (1980), which proposes that an outcome is the result of choices individuals make about when and how to use technology. The notion of the rational actor, as used by Markus, is intended to convey "purposive behaviour" (Markus, 1994, p.122). As it is framed in an earlier paper by Markus and Robey (1988): "In the 'rational actor' perspective, people and organizations evaluate alternative courses of action and exercise free rational choice" (p.585). Markus does not commit to a specific deliberative mechanism by which people make rational choices. Accordingly, in following Markus, the use of the term 'rational actor' within this study needs to be distinguished from the account of a 'rational actor' within Rational Choice Theory, which asserts use of instrumental utility-based mechanisms in the context of economic behaviour (Scott, 1999). While there are naively 'good' and 'bad' uses, other uses need a more sophisticated assessment. Rational actors sometimes intentionally use media for what might, superficially, be considered a 'bad use' - such as distancing (Sproull & Kiesler, 1986) - to conduct difficult negotiation with a superior, to balance power, or to circumvent problematic social situations. Further, the rational actor perspective proposes that users

may deliberately continue using media in a way that has potential for negative effects, because there are also positive effects that they hope to achieve.

The second of the perspectives advocated by Markus can be related to the “emergent process” view of Orlikowski & Robey (1991), which proposes that technologies and the choices of users interact as mutually causal influences that occasionally result in unforeseen, and sometimes undesired consequences. Rather than blaming negative effects purely on features of technology, they may emerge from the actions users take to attempt to minimise negative effects. While the first perspective proposed by Markus (1994) is still somewhat technologically deterministic, the “emergent process” view proposes that what technology is ‘good’ or ‘bad’ for is socially defined and possibly unique to a particular social situation. Markus (1994, p. 146) concludes from her study that “...effects will always depend, at least in part, on how people understand these technologies and choose to use them. At the same time, the complex, systemic interactions between people and technologies ensure that the social effects...may continue to appear ‘puzzling, evasive’...”.

To the extent that most analytical frameworks attempt to render a complex phenomenon according to particular dimensions or axes, the limitation of media richness theory is not that the notion of “media richness” is fundamentally flawed, but that it proposes a simple directional vector of influence. In so doing the approach ignores context, the systemic interactions between people and technology. It would nonetheless be hard to argue the extreme opposite case - that technology (more specifically an online discussion list in this case) does not have a shaping influence on communication. One might argue that by definition tools, however they are used, alter the opportunities and costs presented to users - tools have particular ‘affordances’ (Norman, 1999). While one medium is not inherently richer than another, they do offer different opportunities and costs in a given social context. What remains significant to this case study is to understand how such socio-technical

changes potentially impact on the governance process. A combination of the ‘rational actor’ and ‘emergent process’ models proposed by Markus (1994) appear to be well suited to the task (Hinds and Bailey, 2003; Romm and Pilskin, 1997).

2.3.2 Network approaches

2.3.2.1 The network as metaphor

For studies of social process involving online or web-based technology, the network metaphor often appears to be a natural fit. Studies typically focus on the behavioural affordances of a socio-technical network (Wellman et al., 2003), or the behaviours observed within a network (Hindman, 2008), rather than the specific features of any particular technology. With access to the large volumes of data automatically recorded as a result of our online interactions, researchers mainly use statistical approaches, and are able to describe network features, as well as develop high-level behavioural axioms as a result. While this may seem a step away from the interpretivist approach framed in the last section, network models are not necessarily used in a deterministic manner. However, given the research focus on the details of interaction at small scale and very local level, I do not use statistical network modelling in this study. To the extent that network approaches none the less significantly inform my theoretical framing of online technology, and are also implied in the first stage of data gathering and analysis, I recount aspects of the approach relevant to this work.

Social network analysis (Wasserman & Faust, 1994) models the number and strength of relations between individuals or nodes in a network, and then studies properties or features of the resulting model: the types of connections that exist, the existence of clusters of highly interconnected nodes, the degree of interconnection between clusters of nodes etc. One early result of the approach is the notion that interaction on the internet follows a power law distribution (Barabasi, 1999) - what is informally known as the 80/20 rule. In

network terms, the vast majority of connections are shared by a small minority of nodes, who for example become the hubs of communication within the social system. Shirky (2003) claims that a power law distribution is inevitable in systems where people are free to choose between many options: "Diversity and freedom of choice creates inequality - and the greater the diversity, the greater the inequality." (p.1) In other words, the very act of choosing, spread widely and freely enough, creates a power law distribution through a mechanism known as 'preferential attachment'.

In spite of the relative popularity of network approaches, Mejjas (2006) is critical of the resulting models' blindness to the context a network is embedded in. While social network models can tell us about the relations that exist between people in a network, they for example help us understand 'who is talking to who', the content of interactions are lost in the process. This significantly limits the descriptive and explanatory power of the approach. Furthermore, crucial for a study in the field of information systems, the enabling technology itself is only present by inference in models. Traditionally, social network analysis focuses entirely on the relations between actors as nodes.

2.3.2.2 Socio technical interaction networks

An alternative to social network analysis in its traditional form is Kling's Socio-Technical Interaction Network (STIN) approach (Kling, McKim and King, 2003). Kling et al. position STIN in the first place in response to what they refer to as the 'standard model' of IT rather than specifically other forms of network analysis. In their research of online forums, they maintain the standard model emphasises the information processing features of tools, and treats actors as individuals without organisational context - which provides an inadequate understanding of human behaviour within the forum. The standard models are unable to account for institutional complexity, the complexity of benefits derived and costs

incurred and the "complexity and nuance of human motivations and relationships". The same can be said in this context of social network approaches as I outlined above.

In the context of Social Informatics research, which seeks to diverge from earlier, deterministic models for measuring the social impacts of technology (Williams & Edge, 1996), Kling et al. accordingly developed the "socio technical interaction network" (STIN) approach. The STIN approach proposes that "technology-in-use and a social world are not separate entities - they co-constitute each other" (Kling, McKim, & King, 2003, p. 54). The approach methodologically addresses this duality by conceptualising interaction networks as heterogenous – both in terms of what constitutes a node, and in the nature of the ties that connect them. As a result, "STIN models foreground such socio-technical concepts as: content control, resource dependencies, the work required to make a system useful (articulation work), work and resources required to keep a system sustainable, translations used to mobilise resources, and the business model and governance structures" (p. 54).

The STIN methodology relies centrally on defining groups of system interactors as "roles" and then modelling the relations between these. It forgoes statistical modelling or expression of the relations in favour of a 'thicker' description of the vectors of power, the flows of resources between nodes in the network. Furthermore, technology is afforded one or more nodes in the STIN model, making its role as resource to power more explicit.

Kling et al. (2003) acknowledge that their formulation of STINs had been significantly influenced by Latour's actor-network theory (ANT) (Latour, 1996), as well as their own prior research about "Web models" of computerisation (Kling & Scacchi, 1982). All three approaches consider "heterogeneous social and technical elements, which are brought together into complex networks that cannot be reduced either to technological determinism or to social determinism" (Kling et al., 2003, p. 66). They point to what they none the less perceive to be major epistemological and methodological divergences. In ANT, the

primary social process that animates the network occurs when parties try to enlist others in a central project. STIN models do not predefine a single driving social process and require the analyst to define both relationship and dynamics of social action. One could argue that ANT encourages researchers to frame a social process in terms that may not optimally describe their dynamics by focussing on enrolment as the driving force. STIN is also more conservative in attributing action to non-human agents, a departure from Latour's often criticised "strong symmetry" between human actors and non-human agents in a system.

While STIN is discussed here from a theoretical perspective, it also constitutes a network modelling methodology. I will expand on the degree to which I employed STIN modelling as an analytical approach in the chapter covering method. From a theoretical perspective, the challenge with STIN is that it models a stable set of practices - a relatively static situation where there are a small number of organisational units and technologies to consider. This is well suited to co-operative work or to corporate environments. However, in the context of community governance, the resulting models are often too "static" - the roles and actors within them change from conversation to conversation - as does aspects of the role of the technology. I do however rely strongly on Kling's articulation of the socio-technical perspective through STIN - in particular the politicised notion of "roles", and the stronger focus on technology as 'actor' within a socio-technical system.

As a final note: Kling makes a point of using the term Socio-technical *network* rather than *system*: "We use the term network rather than system because these configurations are open ended and not 'designed.' A network, by contrast, is loosely organised, often imperfectly integrated; has nodes that may be part of one to many other networks as well." (Kling et al., 2003, p. 52) While a systems theorist would likely argue that most of these features equally apply to a systems characterisation, the use of network seems appropriate given the focus on relations between actors and technology both as nodes, and the way in

which technology nodes mediate connections between actors. Given that the STIN approach is however not literally applied in this research - I do not present any “network” models of the case - I chose to use the more general term “*Socio-technical system*” to characterise the case. I do this to avoid the expectation of an approach focussing more explicitly on network modelling or the use of social network analysis.

2.3.3 Transaction cost theory

The socio-technical systems approach offers a comprehensive framework for describing relational interactions, but is not prescriptive in respect of an explanatory framework. Social, political and economic factors are commonly considered when seeking to explain the basis of observed relational phenomena and all these factors are relevant in the study presented here. Somewhat less common are factors explaining why individual actors respond to the affordances of a technology as they do, and how the socio-technical system might be sensitive to their choices. This aspect of individual behaviour is important in this study because of its focus on citizen-to-citizen interaction.

In the introduction, I noted that Bimber (2003) asserts that “socio-technical developments do not determine political outcomes, but instead simply alter the matrix of opportunities and costs associated with political intermediation, mobilisation, and the organisation of politics” (p. 231). Shirky (2008) and Benkler (2002) similarly use language that draws on behavioural economics when they propose that online social media reduce the co-ordination cost associated with collaborative action. While not proposing formal economic models of human behaviour, they each re-contextualise earlier work by Coase (1937) - appropriating particularly the notion of transaction cost from Coase’s theorem. As originally defined (Coase, 1937; Williamson, 1987) transaction costs refer to the range of costs associated with making a transaction - from the costs of negotiating agreement, to the costs of coordination and the costs of motivation (or commitment). Such costs were said to

be determined either by human characteristics (bounded rationality and opportunism), or by the type of transaction (frequency, uncertainty, asset specificity) (Ciffolilli, 2003). Coase's seminal work (1937) proposes that organisational forms are the result of attempting to institutionally minimise the extraneous costs associated with transacting. Because of changes in co-ordination cost brought about by the web, Benkler argues, collective governance and flat organisational hierarchy are becoming increasingly dominant forms of social organisation. Shirky (2008) in turn claims that loosely co-ordinated online groups are supporting "... serious, complex work, taken on without institutional direction" (p.47) as a result of the changes in co-ordination cost.

Benkler (2002), however, questions applying economic models that rely on the purely rational (and profit motivated) actor as originally proposed by Coase (1937), stating that *" the emergence of free software as a substantial force in the software development world poses a puzzle for this organization theory. Free software projects do not rely either on markets or on managerial hierarchies to organize production...[a] critical mass of participation in projects cannot be explained by the direct presence of a command, a price, or even a future monetary return..."* (p.374)

He coins the term "commons-based peer production" to describe a new model of economic production in which the creative energy of large numbers of people is co-ordinated, bottom up, without traditional hierarchical organisation or financial compensation.

While Benkler or Shirky are able to paint a compelling picture of changes in social organisation at hand of changes in co-ordination cost (though not all would agree with the ubiquity or true extent of these changes (Hindman, 2008)), the notion that there exists a 'matrix of opportunity and cost' requires a broader understanding of the socio-technical context. Beyond the effort or cost of participating and co-ordinating social participation - how do we account for the motivation to contribute, the benefit that participants derive?

Lerner and Tirole (2002) for example present a good overview of the range of diverse micro-motivations that drive free software developers. Other studies find common behavioural factors - e.g. that when users are set specific goals, and/or given feedback on their contributions, they are more likely to participate (Beenen et al., 2005; Cosley, Frankowski, Kiesler, Terveen, & Riedl, 2005). A synthesis suggests a complex matrix of potential benefits of participation for users, where not all ends are equally valuable to all members - nor costs necessarily carried equally.

As it is framed here, the notion of transaction cost is used differently to its roots in economic theory, where in purest form it is associated with the mechanisms of 'rational choice theory' (Scott, 1999). The latter, put simply, holds that the choices of individuals can be modelled after a utility function – "an individual acts *as if* balancing costs against benefits to arrive at action that maximizes personal advantage" (Friedman, 1966, p.13). Rational choice theory has however been subject to extensive criticism in context of social science, not least for the reliance on pure instrumental rationality. The approach of this thesis is not to propose formal economic models of behaviour regardless of their orientation to individual rationality. These models exactly move away from the contextual, and from the complexities of individual motivation, psychology and social embeddedness, to model social behaviour at large scale, based purely on transaction costs. I do however find that TCT offers a useful mechanism to understand how technology potentially alters the 'matrix of opportunities and costs' that each actor in the socio-technical context is faced with – it is used as a sensitising device. While, in opposition to technological determinism, I do propose that rational actors, as conceived by Kling (1980) and Markus (1994) make choices and act with intentionality related to environmental costs, but this is not to imply the perfectly calculating 'homo economicus' that Benkler (2002) also argues against.

In similar vein, Cordella (2006) makes an investigation of the role of information technology in lowering transaction costs within a business environment. He categorises transaction costs into search, negotiation and enforcement costs and finds that, while information technology can lower some aspects of transaction cost - for example reducing information asymmetry (a *search* related cost) by making information more readily available - it simultaneously introduces new costs. As Butler (2001) also notes, more information soon enough leads to information overload. The paradox suggests complex interaction between costs and benefits that require changes to be considered holistically. I have contextualised Cordella's (2006) transaction cost model within direct democratic governance, where:

- *Search costs* refer to the cost of gathering information - in other words becoming and staying informed about an issue, as well as about the context of social relations it is embedded in.
- *Negotiation costs* are interpreted as the cost of deliberation, the costs associated with establishing workable and mutually agreeable solutions.
- *Enforcement costs* refers to the cost of monitoring and policing agreed performance, including for example the costs to maintain transparency in process.

Given that I am using the notion of transaction cost within a broader theoretical framework, I adopt these characterisations in an open rather than closed sense - using each of the categories to sensitise my analysis to possible dimensions of cost rather than attempting to formally categorise. The grounded approach that the study takes implies that I do not treat each symmetrically, nor impose any particular model of transaction cost as formal ontology. The research however provides an opportunity to reflect on the characterisations in light of the case to consider which costs (and opportunities) prove to be most relevant.

My own earlier research (Van Der Merwe & Meehan, 2009) investigates the challenge of maintaining participation in an online “community of interest” (Wenger, 1998) at hand of transaction cost analysis. Authors report one of the biggest challenges for an online community is to sustain broad participation: many members are active only for a short period after joining (Beenen et al., 2005); very few members typically contribute the bulk of communication (Beenen et al., 2005; Butler, 2001); and an appreciable majority of remaining members are “lurkers” (Nonnecke & Preece, 2000) who contribute little, if at all. An economic approach suggests the online community offers a pool of resources as benefit to members - from knowledge, to potential status and personal support. In return, there is a cost associated with participating - the work of contributing, or, if nothing more, to filter and digest the communication that one receives as a member. The study found that, by finding an appropriate balance of cost versus benefit, participation could be improved. An example would be to split conversation into a carefully chosen number of ‘channels’ - the more specific the channels, the higher the ratio of ‘signal to noise’ for a given user, reducing transaction cost. As Butler (2001) however notes, a community requires at least some critical mass to sustain itself - too many channels and the system dissolves. From a theoretical perspective the ‘cost-benefit’ framework provided a successful tool to analyse the software by helping to recognise both the relationship between cost and opportunity, as well as which costs and opportunities were relevant to a particular objective.

From this work also emerged a sense that it was important to answer a second class of question - “for whom” the transaction cost was being optimised, and how this affected community outcomes. Given that contribution was typically asymmetrical, which contributors benefitted from any given change, and how might reducing transaction cost play a role in encouraging more equal participation? More than that, understanding the role an online community might play in governance required better insight into context, the

relations between contributors and how this was potentially affected by technology choices.

2.3.4 Technology in democratic governance

This section discusses the role of online media in democratic governance in the light of earlier sections that frame a broad approach to technology. I investigate how authors employ the notions of socio-technical systems or networks, as well as the mechanism of transaction cost in their studies of online tools in the context of civic governance. While the earlier sections present a theoretical framework, this section is intended as a review of the use of these theories in fields related to this study. The range of relevant material is too vast to treat in depth here. I have chosen instead to focus on points that emerged as significant during successive iterations of the structured case research cycle - in particular identifying gaps in existing work or informing lines of enquiry. I further focus on the work of authors I have already built an engagement with in earlier sections.

Ciborra (1988) commented, just prior to the advent of the public web, that a communication system (software for workgroups) can impact the content of messages, but also the processes and organisation of a group. This is a potentially profound claim considered in the context of democratic governance. I discussed how both Shirky (Shirky, 2008) and Benkler (Benkler, 2002) are optimistic of the changes in society as a result of the growing adoption of online communication technology. Shirky for example comments on the advantages of the scale free (or power law) distribution of relations online - shaping a social system that is at once dynamic, and at the same time robust as the risk inherent (to the system) of the failure of any given node is relatively small. For Shirky, the mechanism of preferential attachment that is responsible for the scale free distribution is meritocratic - and his work accordingly focuses on new opportunities for empowerment and group

organisation as a result. Hindman (2008) in turn claims that “online democracy” is a myth as a result, the online sphere merely creating a new ‘elite’ rather than being broadly empowering. While Hindman’s claims are supported by the statistical analysis of large samples of web traffic, his is none the less a ‘top down’ study - he looks for the features of preferential attachment by comparing the statistics of most visited websites. His work has no insight into the ‘invisible web’ (Wright, 2009), online spaces that are not counted in traffic monitoring systems, nor indexed by search engines, and so invisible to his work. The community lists and forums that this research focuses on is one example. It will be interesting to determine whether local online spaces have a similar distribution - and if so, what the impact is on governance deliberation.

A number of authors (2001; Castells, 2000; Wellman, 2002b) employ a network centric description of interaction and social structure afforded by technology. Wellman’s research contrasts traditional neighbourhood communities with internet mediated social networks (Wellman, 2002a; Wellman, 2002b; Wellman, 2005). He suggests that, as a result of the network affordances of the online space, social ties are more specialised, with different network members supplying emotional support, friendship or information. The ties are voluntary and less spatially defined, and as a result people act in multiple, overlapping networks or social circles, with potentially limited involvement in each (Wellman, 2005 #103; Castells, 2000). In Wellman’s “networked individualism”, the individual becomes the centre and author of their own private network, dynamically assembled from their various relations. While this networked approach is not incompatible with the notion of community, Wellman’s research does imply an increasing fluidity in its structure. In this regard, his findings echo Bauman’s (2001) more philosophical notion of “liquid modernity”. From the perspective of any particular online community, participation at the periphery becomes the norm, rather than being the prelude to more committed engagement. I have already discussed some of the weaknesses pointed out by Gurstein (2007) of the

model of the networked individual, which in his view over optimistically portrays the individual integrating with the networked social sphere “without intermediation”. The model ignores the role of power, as it does the notion that we are still socially shaped and thus not entirely ‘free agents’ roaming the web. In earlier sections I made a strong case for the relevance of community of place as more than just the intersection of the fragmentary networks that individuals import to the system with themselves - online as much as offline. The case study will determine to what extent this position can be maintained.

With regard to the role of power in social organisation, Williamson (1980) proposes that “[theorists] who claim that hierarchical modes of organization are explained by power rather than efficiency neglect transaction costs in reaching this conclusion ” (p.5). In the previous section, I discussed Coase’s theorem (Coase, 1937), the basis for this statement. Assuming that the economic approach is at least partly justified one has to ask: if technology has an influence on transaction cost, in turn shaping forms of social organisation - who controls the technology? Some would claim technology is not ‘controlled’ as such in the paradigm of socio-technical networks, that networks are inherently dynamic and open ended rather than ‘designed’. Castells (2000) however points out that the network has very particular requirements of what constitutes a node, in other words it constrains by its design (low level as that may be) who or what is admitted. Further, while there is relative freedom to act once within the network, nodes can only ‘express’ themselves in the ways the network is programmed to allow. This relates to Lessig’s point in Code is Law (Lessig, 2006). The very network technologies that allowed the web to be relatively open and transparent in its early days can easily be abused to become the technology of perfect surveillance - both constraining action, and offering a new version of the “panopticon” that Foucault saw in structures of governance (Willcocks, 2004). His point is that, while the commercial interests of global corporations increasingly fuel the growth of the web, it is a ‘public good’ in dire need of constitutional protection.

While the point is made about the Internet at global scale, one might ask if it equally applies to local online deliberation. Gurstein (2007) positions technologically enabled community exactly as a site of resistance to these globalising networks, a space where constitutional or policy alternatives can be re-imagined. However, the discussion of community shows that there are similar struggles of power within a community, much as they seem less ominous. Who are the local gatekeepers, and what role does a local online network play in terms of who is part of discussion, and who not?

Clift (2008) makes a comment that, were it entirely true, would scupper the premise of this research project. He claims that "[r]epresentative democracy is based on geography, on people connecting with one another locally to react to and influence government. And yet, rarely does anything truly interactive happen online that enables citizens to jointly solve problems or to get directly involved in efforts to make their communities better.

Democratic participation online is having the effect of disconnecting us from our physical place in the world, to our collective demise." (p. 102) Fortunately not all would agree with him - studies by the likes of De Cindio (2007) and Flouch & Harris (2010) show the opposite picture of online engagement, while Kavanaugh (2008) cites several studies to show that 'any' participation online predisposes to further engagement offline. However, there is relatively little literature that looks specifically at the role of online deliberation in *local* governance, in particular that is able to portray *both online and offline* aspects of governance. Further, it is by the nature of the case selection, funding or organisational objectives of many of these studies that they investigate citizens' engagement with government, rather than direct local governance as I defined in introduction.

As a result, to recap a point I made in Chapter One, researchers have studied particularly top down initiatives aiming to engage citizens with government (De Cindio & De Marco, 2007; Dahlberg, 2001b; Fishkin, 2009; Price, 2009), and broad based bottom up initiatives

of citizen activism (Garrido & Halavais, 2003; Vegh, 2003). A survey of the literature finds that these processes are characterised by the logistics of large-scale distributed participation, and by the imbalance of power implicit in the interaction between citizens and government. In other words, researchers most commonly investigate how the online overcomes the limitations of geography and scale, and how it allows local interests to be democratically represented in institutionally driven processes at city, regional or national level. Postill (2008) however proposes an interesting counter current in the understanding of online engagement, that “as numbers continue to grow, the internet is gradually becoming ‘more local’” (p.414). While I do not believe there is sufficient evidence to support this claim in its strongest sense, the exploratory work cited proposes there is indeed a degree of localisation, a re-approaching of the near. Postill goes on to suggest that the process of localisation poses new challenges to researchers: “Logistically, it demands that they spend sufficient time in a local setting in order to get to know, both online and offline, those who live, work and/or play there. Methodologically, it renders the very distinction of online versus offline social domains even more problematic than it has been hitherto” (p.414). It is exactly this area of research that this thesis hopes to engage.

2.3.5 Summary - technology frameworks

In conclusion, this study does not approach technology deterministically, instead framing the case context as a socio-technical system (Kling et al., 2003). This perspective proposes that where technology is introduced to a social setting, the intentions of users will strongly determine results, while outcomes are none the less sometimes unpredictable in spite of good technology and positive intentions (Markus, 1994). This may be because technologies and the choices of users interact as mutually causal influences (Orlikowski & Robey, 1991) - and what technology is ‘good’ or ‘bad’ for is socially defined, possibly unique to a particular social situation. Markus accordingly (1994, p. 146) concludes that

"...effects will always depend, at least in part, on how people understand technologies and choose to use them".

I discussed the use of the network as metaphor for socio-technical systems. I found that social network models are often blind to the context the network is embedded in, and lose the content of interactions in the process of network modelling, limiting their explanatory power for the sorts of questions I set out to investigate. The technology itself is also not sufficiently visible as a mediator of the connections between nodes. As a result I choose to draw on Kling's articulation (Kling et al., 2003) of socio-technical networks through the 'socio-technical interaction networks' (STIN) framework. The STIN framework uses 'roles' as the nodes of a network, and is concerned with the resource flows between roles, and technology as an agent or mediator of these flows between actors. This introduces more of the context - Kling sees roles as a theoretical bridge between social structure and individual agency, in that they are potentially socially given, but also create or shape both the introduction of technology, and the users who adopt them (Callero, 1994). STIN presents a more politicised view of socio-technical networks, and particularly the role of technology, than is traditional - it focuses interest on the roles and processes privileged, or indeed created, because of the introduction of a technology.

While network approaches offer a suitable descriptive framework, I rely on the theory of transaction cost (TCT) (Coase 1937) as an additional explanatory mechanism. Coase proposed that organisational forms are the result of attempts to minimise costs or overheads associated with economic interactions. Castells (Castells, 2000) proposes the recent growth in open networks (as form of social organisation) is exactly the result of technology lowering the cost of interacting or communicating in non-hierarchical networks, which were previously limited in size because of logistical difficulties. Cordella further successfully applied the notion of TCT to technology adoption (Cordella, 2006),

and found that while some 'costs' were reduced by the introduction of technology, new costs were typically introduced in what emerged to be a complex balance of cost versus benefit. It follows that in the socio-technical context, it is not trivial to determine 'economic' variables - a complex range of behavioural factors have impact on what constitutes opportunity and what cost - and these are further not the same for all users of a system. My own earlier work (Van Der Merwe & Meehan, 2009) suggests that, rather than making broad statements about one form of cost versus another, it is important to say for whom costs are reduced, and in what manner - it is important to understand transaction cost in context. This has strong resonance with the manner in which STIN conceptualises the socio-technical network. For the purpose of this study, the influence of online media on local governance is accordingly considered from the perspective that "socio-technical developments do not determine political outcomes, but instead simply alter the matrix of opportunities and costs associated with political intermediation, mobilisation, and the organization of politics" (Bimber, 2003, p. 231).

I also discussed some of the existing research relating to online democracy - particularly where a theoretical perspective is taken that potentially informs this study. A number of themes emerge from the review: the power law distribution of online contributions and relations as a challenge for the democratic public sphere (Hindman, 2008); the notion of networked individualism as opposed to 'community of place' as model of individual engagement (Wellman, 2002b). Castells (2000) further proposes that in a social network the actors (considered nodes) do not have complete freedom, much as their networked individualism collectively accounts for part of the structure. The network itself is programmed (Castells, 2007; Lessig, 2006) so that it controls flows of information (Deleuze, 1995, in Willcocks, 2004), or provides limited and potentially inequitable affordances for action, whether deliberately or inadvertently. Gurstein (2007) positions 'community of place' and its online manifestations as a site of resistance to the inequitable

corporate networks that are increasingly defining the global public sphere - but what of the dynamics of power and control within the socio-technical networks that constitute the hyperlocal public sphere in turn?

Finally, I reviewed literature that specifically investigates the role of online tools or spaces in direct deliberative governance. I find two trends: top down studies that investigate how purpose-designed deliberative environments potentially mediate between civic society and government, and bottom up approaches which focus on technology appropriation in citizen activism. In both cases researchers study processes characterised by the role of technology in overcoming the limitations of space, or the imbalance of power between citizens and government. There appears to be a significant gap in literature dealing with online deliberation at the hyperlocal level - where I argued that the limitations of scale and geography afford distinctive governance processes. Further, perhaps as a result of the focus on deliberation at city or regional level, very little of the literature investigates the role of online deliberation in direct governance - where residents become directly engaged in the process of governing the world they are part of. The combination of directness and the hyperlocal proposes an entirely new set of socio-technical dynamics for research to investigate.

2.4 Conclusion

2.4.1 Lines of enquiry

In the introductory chapter, I stated the overall research objective for this study: to investigate the role of online deliberation in local civic governance. I qualified that the research focus is not deliberation per se, but the role of online technology, or the online deliberative environment in local governance. Furthermore, I am most interested in hyperlocal civic governance, where direct participation by residents is potentially a strong

feature of the governance process. In this chapter, I accordingly unpacked elements of this research objective in three sections, engaging with the related literature to provide the basis for further work. This section briefly summarise the lines of enquiry that follow from the engagement.

I discussed *local governance and social action* to frame a particular understanding of direct civic governance in the context of a local community of place. This positioned governance as a process involving a broader range of role players (and particularly decision makers) than traditional representative government. I found evidence that there has been a recent move in public administration toward the notion of governance, and with this, renewed interest in localism - a shift not so much attributed to top down initiative as a matter of contingency. Local governance focusses research interest on place as a unit of governance, and on the direct involvement of people living there in making decisions, but also becoming involved in enacting the outcomes. How might one however interpret this context, given that recent academic thinking has exactly moved away from the geographic understanding of social organisation? Is 'place' no more than a forcing function for the intersection of relational communities, or otherwise simply an administrative unit? I proposed in contrast a return to the notion of 'community of place' - as a normative ideal, but also as a meaningful social category that people construct a sense of belonging to. There is evidence that in the local context, people invest in a 'sense of community', which in turn becomes a powerful organising ideal - much as thinking about what community means, and the ideals for it, are fluid territory.

It is this context that deliberative technology is introduced to - to ask how technology plays a role in hyperlocal governance requires us to ask how technology plays a role in the processes of community. What role does online communication play in people's constructing of their own imagined community; in forming a shared pragmatic

understanding; and in shaping the extent to which common ground becomes a resource to collective action? I discussed also some of the tensions or vectors of influence inherent in local community. I am critical of the implicit unity of will that is too frequently assigned to community, bringing unwarranted normative assumptions that a decision is for example better for having been made “by the community”. Shared goals are understood as emergent and partial, the community itself dynamically constructed in the struggle of individual wills. This proposes we ask how technology mediates in this struggle, and what role it plays in the balance of individual wills towards the collective. Which roles are created, and how are individuals or groups within the community empowered or disadvantaged when technology is introduced? In addition to ‘inward facing’ aspects, I also discussed that community exists in communication with a broader social environment. In the context of governance, community potentially becomes the source for a collective sense of agency, a site of resistance to external threat. What role does technology potentially play in this process - do members of community feel a stronger sense of contingency as a result of online interaction? If so, through what mechanism?

In the second section of this chapter, I discussed the *theory of direct deliberative democracy as a normative framework* to evaluate findings about online community interaction and local governance. Each of the constituent terms present a line of questioning of the more detailed observations relating to local governance: How are residents able to contribute to governance - how *direct* is their influence, or does the technology support new forms of representivity? What are the features of residents’ online *deliberation* - in particular compared to alternative channels? Does local online deliberation serve instrumental or predominantly expressive purpose - and does it help the community form consensus, or maintain pluralism? Finally, how does this potentially serve the fundamental *democratic* principles of individual equality and personal autonomy?

I also highlighted four common concerns with the practical implementation of direct deliberative democracy which help to guide the inquiry: Direct democracy has a demanding conception of citizenship, requiring high levels of participation - does online deliberation potentially mitigate this? Does technology play a role in developing the knowledge or skills required of participants in the governance process? What of the criticism that rational deliberation excludes forms of argument, or discriminates against many participants? Lastly, does the introduction of technology, or the presence of an online deliberative space, mitigate against potentially oppressive uses of power in local governance? Does the technology reinforce existing lines of power, or allow a new balance to emerge?

The questions I pose must be framed in a well-articulated view of technology to be approached meaningfully. This does not propose I present yet more high-level questions, but instead consider mechanisms through which the social process is influenced by technology. In the third section of this chapter I clarified that technology or online tools are understood to be part of a socio technical system. The introduction of technology is not considered deterministically, but rather to alter a 'matrix of cost and opportunity' presented to rational actors - through the affordances of technology itself, as well as the roles and practices created around tools. In this regard, the socio-technical interaction network approach presents a useful descriptive framing, placing emphasis on the roles created or influenced, and the notion of resource flows that are mediated by technology. Since neither money nor goods are literally exchanged in the context of hyperlocal governance, resources can be understood to refer to influence, power and the ability to construct the community, or have issues resolved in an individuals' favour. The theory of transaction costs in turn presents an explanatory mechanism to make the influence of technology visible. For each of the higher level questions I have posed, one might ask: what costs are altered, what opportunities are created, and which roles in the network are advantaged or

disadvantaged in each case? How do particular changes in the socio-technical system potentially mediate the flows of resources, and how do rational users adjust their engagement with governance as a result.

In the section discussing technology, I also looked at research in online democracy which proposes existing answers to these questions: Online interaction is frequently characterised by a power law distribution of participation; it is commonly held that place becomes increasingly irrelevant as a result of online “networked individualism”; the network itself becomes a powerful influence on interaction, often magnifying imbalances of power. Yet these studies are most frequently characterised by a ‘top down’ perspective, framing technology in terms of its role ‘outside of’ place, and online deliberation as a process that largely mediates between citizens and representative government. Conversely, this study investigates the role of online deliberation that is both geographically bound and directly between residents of a community. More than considering the hyperlocal as a somewhat neglected corner in the continuum between local and global governance, it proposes that governance at this level has a distinctive character, presenting a unique set of challenges and opportunities for the implementation of online deliberation technology.

The discussion above presents a number of broad ‘lines of enquiry’. My objective is in other words not so much to test a hypothesis, as to approach these questions from a grounded perspective. Rather than imposing a set of success or failure criteria on technology, the intention is to see what role it practically plays - and from there to develop a refined understanding of online deliberation in this particular context.

3 Method

In this chapter I give an account of epistemological considerations as well as high level research design choices; implementation-level details of method are covered in Chapter Five where each of the stages of research are discussed in more depth. This approach is in keeping with the use of the structured case framework (Carroll and Swatman, 2000). The first section of this chapter discusses my use of structured case as overall organising framework for the research. Thereafter I discuss the epistemological basis for the study, and the choices that follow from this. In the third section I outline the three stages of data gathering and analysis in a little more detail, with high-level discussion of methodological choices at each stage. I then go on to discuss the data sources I draw on, as well as how these are managed or organised. Finally, I present ethical considerations and the steps I have taken to mitigate potential concerns.

3.1 Framework: study design

The literature review revealed that the use of online media in hyperlocal civic governance has had very limited research attention. Given that the territory is not well-mapped, as it were, an exploratory approach is appropriate at this stage - allowing early theory to be built, or at least for theory to be combined where some aspects of the problem may have been studied, perhaps in similar, but not identical circumstances. To do this in a manner that makes no, or very limited assumptions about how theory integrates or applies to the specific context - in other words, without embarking with a fixed hypothesis - requires a grounded approach where sense making is rooted in observation in the first place (Glaser & Strauss, 1977). The proposed framing of governance as a co-constructive process further suggests that an interpretive, qualitative investigation (Adams, Lunt, Cairns, & Cox, 2008; Mason, 2002; Myers, 2009) is required. My analysis is concerned with the content as much

as the structure of interaction, with the interpretation that participants themselves make of events, and the impact that online interaction has in a broader socio technical context.

These objectives imply that the study must draw on data from multiple sources, as well as likely rely on more than one form of analysis to gather evidence of interactions, the social context that informs these, and also the interpretations that participants themselves make of events. While I will later discuss some of the advantages and disadvantages of such methodological pluralism, Mingers (2001) points to a key challenge that is relevant here: because there are few suitable frameworks, researchers struggle to integrate results, to maintain a coherent narrative, or to build cohesive theory from heterogeneous phases of analysis.

3.1.1 Research framework

Carroll and Swatman (2000) present very similar challenges to those above as motivation for the development of the 'structured case' research framework. Their framework builds on protocols by Yin (2003) and Eisenhard (1989) - which Carroll and Swatman claim are limited in that they present research as a relatively linear progression, the result of their positivist points of departure. "Inducing theory from qualitative data is adaptive and highly iterative; neither of these strategies suggests the flexibility and opportunism required when studying a poorly under-stood situation." (Carroll & Swatman, 2000, p. 236)

Structured case features a process model with three components:

- An evolving conceptual framework (CF) representing the current state of a researcher's/evaluator's aims, theoretical foundations and understandings. The researcher begins with an initial conceptual framework (CF₁) based upon prior knowledge and experience and iteratively revises it until the enquiry terminates.
- A research cycle structures data collection, analysis, interpretation and synthesis.

- Literature-based scrutiny is used to compare and contrast the evolving outcomes of the enquiry with literature.

It is worth emphasising that structured case is not intended to be a research method per se, but as an organising framework to guide successive stages of work. structured case is relatively agnostic as to specific methods for data capture or analysis, much as it is often used to guide case study research (Irani, Love, Elliman, Jones, & Themistocleous, 2005; Plummer, 2001). Carroll and Swatman use the term 'case' in the broad sense of 'what is being studied', rather than the narrower sense of the case study research method (Stake, 1995). In common with grounded theory (Glaser & Strauss, 1977), structured case encourages the researcher to produce new or revised knowledge that is demonstrably rooted in observation. However, Carroll and Swatman's (2000) approach more openly accommodates an initial conceptual framework or theoretical framing, rather than striving for the 'ideal absence' of such commitment at the outset. While the absence of theoretical framework in grounded theory is framed as an advantage - to be able to approach a new domain of inquiry without pre-formed ideas or specific hypotheses (Adams, Lundt, Cairns & Cox, 2008) - in practice the PhD process requires stronger formulation of theoretical constructs early.

While structured case accommodates a range of approaches, I chose to employ it specifically for its suitability for case study work. I share with Markus (1994) the motivation for using case study that he quotes of Yin (2003) - case studies are particularly useful when the process or phenomenon being investigated cannot clearly be separated from its social context. One might add - where social structure is as much the object as the context of study, case study research builds theory that closely fits the data (Eisenhardt, 1989; Stake, 1995; Yin, 2003) and so is empirically valid. Proponents (Adams et al., 2008; Suddaby, 2006) make a similar argument for qualitative study using grounded theory.

However, as a general approach, the case study allows a broader range of data gathering and analytical devices while grounded theory follows a more closely defined methodology (Suddaby, 2006). It is for exactly this well-defined methodological structure that grounded theory is sometimes used *within* a case study to perform content analysis - as this study also proposes to do.

3.2 Epistemological considerations

While the choice to use structured case supplies a broad approach and framework to guide work, it imposes neither epistemology nor specific analytical methods. To the extent that case study work is open to approaches ranging from strongly positivist to interpretive (Stake, 1995; Yin, 2003), there is need to be more specific about the sort of explanations one hopes to be able to offer. Before I go into detail of how this study was conducted, the next section covers the epistemological ground that informed choices.

3.2.1 An interpretive perspective

Three linked studies (Lee, 1994; Markus, 1994; Ngwenyama & Lee, 1997) in a comparable domain (an organisational email database) make useful illustration of the proposed epistemological approach. All three draw on the same database of messages - relating to an organisation that Markus refers to pseudonymously as HCP Inc. All three studies are further engaged in a critique of media richness theory (MRT) - which I similarly use as 'straw man' when discussing deterministic theories of the social impact of technology. The studies are however cited not so much for their content as the epistemological points they make.

The first takes a predominantly positivistic approach, much as the study deals with qualitative data. Markus (1994) combines survey, interview and 'interpretive analysis' of email conversations (spanning several messages) - but relies mainly on the survey data to

make key points. She subsequently amplifies points with evidence from email conversations and interviews, which illustrates how an interpretive step is often required to support or make sense of statistical findings. The study investigates the intentionality of users as an alternative to MRT, and is ultimately able to make claims about the extent to which user behaviours were informed by users' intentionality, rather than by the medium itself. There is strong support for such positivistic study in the case study literature - for example both Yin (2003) and Eisenhardt (1989) are proponents. As a result, their protocols focus on framing clear hypotheses, selecting measurement instruments that allow replicability and cross case comparison, and through representative random sampling to produce findings that generalise from sample to population.

A second, independent study by Lee (1994) provides an interpretive, hermeneutic analysis of the same data. His interest is to understand how richness occurs in email communication, informed by how users understand themselves, their environment and their interaction. Lee makes the point that his interpretive analysis is not intended to offer knowledge in competition with the positivist understanding arrived at by MRT. As he succinctly puts it - "[i]nterpretive research does not falsify positivist theory" - instead it provides an alternative perspective. In his view, the resulting understanding has implications for how electronic communication systems are, for example, designed and implemented.

Interpretive study, while it permits an initial theoretical framing or clearly formulated research questions, is not concerned with the same sort of theoretical generalisation as positivistic work (Stake, 1995). An interpretive case study makes its claim to validity not so much in reasoning from a representative sample to population, as from case to theoretical constructs (Myers, M, 2009; Yin, 2003). Flyvbjerg (2006) further proposes that it is a misconception that "[g]eneral, theoretical (context-independent) knowledge is more

valuable than concrete, practical (context-dependent) knowledge” (p. 421). Bauman (in Bauman & Tester, 2001) makes the case for interpretive work less diplomatically, claiming it is misguided to “hope that once the surface incongruities and contradictions are out the way, I’ll find ‘down there’ the clockwork running exactly...” instead he proposes that “ambivalence and uncertainty are the essence of social life and that it is therefore incumbent of sociology to try and capture that flux, without ... wishing it away ” (p.10).

It follows from my literature review that this study aligns itself most clearly with an interpretive perspective. It aims to investigate exactly the ‘flux’ within a community that is bound in place, yet at the same time relational in nature - recreating itself, never fully realised nor permanent (Gurstein et al., 2010). More specifically, the study hopes to understand acts of governance that have been framed in the first place as co-constructive (Hauser, 1998) - the (online) shared defining of social reality and the possibilities for action therein (Cohen & Sabel, 1997). A later section on interpretive validity discusses how such an investigation might none the less provide an ‘audit trail’ for its interpretations, thus providing robust contributions to theory.

3.2.2 Critical approach

Ngwenyama and Lee, (1997) make a third study of the HCP Inc. data from a critical social theory (CST) perspective. More than providing “sound [interpretive] explanation” the authors set themselves the task to make a “critique of unjust and inequitable conditions of the situation from which people require emancipation” (p.151). However, the notion of making critical evaluation extends beyond the researcher - similar critical ability is inferred of research subjects:

"The CST definition of communication richness recognises that, in attempting to enact coherent meaning from a "text," a listener or reader can go beyond achieving a mutual

understanding with the speaker or writer. The listener or reader accomplishes this by critical reflection, that is, assessing one or more validity claims pertaining to what the speaker or writer expressed. Furthermore, a listener's or reader's reflection can lead her not only to the ordinary outcome in which she comes to understand what the speaker or writer means (i.e., mutual understanding), but also the critical outcome in which she emancipates herself from distorted communicative acts.” (p.155)

Using content variables of Habermas' communicative action types, their study implements a detailed discourse analysis, questioning the way in which meaning is passed on, and indeed critically re-evaluated. The research presented in this thesis shares with Ngwenyama and Lee (1997) grounding in the critical social theory of Habermas (1987) and Foucault (Willcocks, 2004). While it makes no assumptions in advance of “inequitable conditions” that require emancipation, the process of meaning construction cannot be treated as apolitical or disembodied. As Ngwenyama and Lee put it - actors formulate their communications to achieve specific outcomes in situations where they enact new and existing relationships with one another. This suggests the desirability of taking a closer look at the pragmatics (Habermas, 1987) of the communicative process to come to a clearer understanding of interaction.

The study remains sensitive to the notions of exclusion and selective empowerment and I raise these issues as they become evident. Regardless of their source, the mechanism that I choose to focus on is generic - the ability of ‘counter publics’ (Dahlberg, 2007) within the community to make use of the online list to engage the majority, and in turn the notion that the community itself functions as a form of counter public in society at large (Gurstein, 2010), much as this may have both positive and negative consequences. I discuss one further aspect of the critical approach in section 3.2.2 where I consider case selection in terms of the broader South African socio-political environment.

3.3 Interpretive validity

Within the broad methodological field of case study research, authors take a range of approaches to strengthen interpretive validity and as a result build robust theory.

Eisenhardt (1989) addresses the issue from a positivist perspective, focussing on mechanisms such as construct validation, cross case analysis and replication logic. I've already discussed why the structured case framework (Carroll & Swatman, 2000) offers more appropriate support for interpretive study - Carroll and Swatman instead focus on iteration, reflecting results back to literature early and often; and on constant comparison (Adams et al., 2008) of emergent insight with the existing theoretical framework. Much has further been written about improving the validity of interpretative research in the broader sense - for example applying a hermeneutic approach (1999) to substantiate interpretation. The onus is on the researcher to leave a clear enough audit trail of the inferences they make to leave reader in a position to judge critically - or, as Stake (1995) proposes, to be part of the process of interpretation and constructing meaning.

3.3.1 Building theory from interpretive case

Following Stake (1995) my expectation was to identify a number of "case issues" within the data at each round of analysis, and to subsequently reflect on these in the light of established theory. Through successive rounds, the scope and articulation of issues becomes more focussed. This has much in common with what Deuze (2006) refers to as principle component analysis: "a way to recognise a particular pattern by considering case studies...then analysed in terms of how it reproduces (privileges) certain norms, values and expected ways of doing things." (p.64) Through iteration, it was anticipated that what I refer to initially simply as lines of enquiry might well develop into what one might refer to as "principle components" within the study of this particular case. The risk with such an approach is that the process of identifying patterns or issues relies on the subjective

interpretation of the researcher. I've discussed the steps the study design takes to mitigate this through the use of relatively structured analytical techniques, in particular leaving sufficient audit trails that the reader is not forced to accept research claims on faith. In addition, the research design incorporates several forms of triangulation (Jick, 1979; Mathison, 1988; Mingers, 2001) to improve the validity of interpretive claims: Multiple data sources are used; constructs are developed correlating the outcomes of multiple methods of analysis; and the analysis relies on the direct interpretations of research participants as well as a group of external evaluators, in addition to the principle researcher.

More broadly, the principles of the Hermeneutic method (Lee, 1994) are integral to the structured case framework. Klein (1999) defines a hermeneutic approach as the movement in understanding from part to the whole and back to part again - similar to the way in which we understand the words of a sentence related to the context of the overall utterance. In this way detailed issues emerging from the case are developed to the level where they are able to comment on, and potentially extend the theoretical frame. Klein further provides a set of principles that have often been cited as best practice when conducting interpretive research. The key elements are: the notion of the hermeneutic circle; the extent to which logical reasoning is plausible and cogent (and presented so); to acknowledge personal preconceptions as the inevitable antecedent to understanding; and the principle of multiple interpretations - that any text can be understood or indeed constructed - differently depending on the perspective of the individual.

3.3.2 Case selection logic

It is by the nature of the questions I set out to answer, but also partly by the contingency of having access to a particularly suitable research case, that I chose to make an in depth

study of the case presented in Chapter 4. I outline the detailed considerations informing this choice below.

In the literature review I made a case for researching online deliberation at the hyperlocal level. My own earlier work (van Der Merwe, 2008; Van Der Merwe & Meehan, 2009) engaged with online governance in forums where participants were distributed and that were not geographically local - what Wenger (1998) would refer to as “communities of interest”. While this made useful analysis of online interaction, the studies had little to say about how the online related to offline experience of participants. My analysis had however suggested it was particularly at this level where participants were most personally invested, and where the direct impacts of online governance discussions lay. I had the sense I needed to look ‘deeper’ into community process to understand the role of online deliberation in local governance.

Rather than focussing on one aspect of interaction across cases - which may or may not have proven significant to governance outcomes - my objective became to understand the role of online interaction holistically, albeit in a closely bounded domain (Stake, 1995). Stake is a strong advocate of single case studies, proposing that rather than to follow statistical sampling logic, “our first obligation is to understand this one case...the first criterion (in selection) should be to maximise what we can learn” (p.4). Stake contrasts this with quantitative research where the objective is to “eliminate the merely situational”, removing context in order to find the most general explanatory relationships. In qualitative, interpretive research, Stake claims that “particularisation” instead is an important aim - to treat the uniqueness of an individual case as important to understanding.

A number of communities were considered as candidates for the study. However, one particular case emerged as the most suitable subject for a number of reasons: it presented a

community of the appropriate size, it had a long history of online deliberation, the records of online communication were accessible, and local governance structures were relatively transparent - their members amenable to interview. The community also presented a well-bounded case in that it was not within the urban sprawl of any nearby city - there was less ambiguity in defining who were residents, and how far their domain of governance extended. Though not central to the selection, there was also the advantage that I had been a resident of the community for several years before engaging in this research. This afforded me direct and regular access to research participants, as well as much longer-term exposure to the case environment than would otherwise have been practical. It follows from the principles outlined by Klein (1999) that there are risks inherent in the use of interpretive methods where my own long term involvement risks personal bias in interpretation, as well as biased interaction with participants because of longer term association. This must however be contrasted with the likely opposite - the bias of an outsider approaching a case with limited understanding of the context, the risk of some level of misunderstanding, as well as eliciting a 'front of house' presentation from participants. I would argue that part of the potential strength of this work is exactly the closeness and understanding of the unspoken background to online communication that my long-term involvement brings.

From a theoretical perspective, the case selection logic follows principles where both interpretive/constructivist and positivist authors seem to find agreement (Flyvbjerg, 2006; Myers, M, 2009; Yin, 2003): that a single case is justified where it is *unusual* or unique, or where it can claim to be *representative* or typical of a situation - in particular where it presents a *critical* view of given understanding by virtue of either of these attributes. The case presented here might accordingly at once be considered unusual in that it presents a less commonly studied context and scope of online deliberation, while at the same time presenting a situation common in villages and neighbourhoods of a given size that exist

throughout the world, both in terms of participants and their use of technology. To be clear, in saying this I do not make a claim for strict statistical representation - that is not the goal of this study. I also do not attempt to use the case in South Africa as a form of outlier, making interpretive comparison between its location and anywhere else in the world, though I acknowledge that regional differences are likely to exist - both within South Africa and globally.

In relation to taking a critical social theory approach – I described in section 1.2.2 the roots of the community's relative cultural homogeneity. The notion of 'culture' is deliberately chosen over 'race' in this statement, the latter being a poor discriminant in the South African context, where there are 11 official languages, and the notion of race cannot be used to imply cultural, economic or even political solidarity. Relatively homogenous communities are still a common feature of society in South Africa – if only by reason of a relatively slow processes of social integration and economic mobility, post apartheid. Having said that, homogeneity is a common feature of the hyperlocal context, not just in South Africa, but the world over – particularly in rural or semi-urban areas. Increased community homogeneity (reduced diversity) arises 'naturally' as one moves from the global to a national, regional, local and hyperlocal perspective. In focusing on hyperlocal direct governance, where, by definition, the co-located community is small enough to govern itself without formal governance institutions, cultural homogeneity is likely to be the norm, relative to communities on a much wider geographic scale. The choice of a relatively homogenous community for the purpose of this study might accordingly be considered a limitation for not being able to investigate the role of local online deliberation in some processes of cultural transformation – while at the same time being a pragmatic choice in terms of the questions I have set out to answer. If anything, many of the complexities introduced by a more diverse demographic are deliberately avoided to be able

to make a relatively 'contained' case study of the role of online deliberation in local governance, rather than to take on more general socio-political issues.

3.4 Methods used

Earlier in this section I outlined the research design this study took - moving from early exploratory work to more focussed analysis and theory building in stages, with each iteration reflected back to an evolving theoretical framework, and providing input to the next. As Carol and Swatman (2000) note, the interpretive research process is in reality highly iterative as work adapts to accommodate a growing understanding of the case. I none the less present the research in a number of distinct sequential stages that broadly reflect how work was carried out in practice.

An initial exploratory phase involved high-level content analysis, as well as conducting preliminary interviews and doing simple statistical analysis of messages on the lists. The entire message archive was scanned and messages coded to help identify the spread of content - for example whether an exchange related to governance, advertised a local event or advertised personal items for sale. Loosely structured interviews established the history as well as organisation of governance structures, and basic statistical analysis gave an overview of the level as well as diversity of interaction on the discussion list. This is reported in Section 5.1

Following this, I sought to gain a deeper understanding of interaction on the lists through content analysis. The initial message codes were expanded in reference to the theory of democracy, and the analysis focussed only on messages relating to governance. The occurrence of specific keywords led to both identifying and interpreting patterns of conversation, as well as gave insight to the different types of contributor on the lists. The

analysis was again supplemented with further loosely structured interviews and field notes.

This is reported in more detail in Section 5.2.

A third stage of work sought the interpretation that participants themselves make of their interaction, and deeper insight to the pragmatics of conversations. Seventy five card sorts were conducted over the course of seventeen, approximately two-hour interviews. Thirteen of the card sort interviews were conducted with community members. Additionally, four were conducted with external subjects. By 'external', I mean participants entirely external to the case study – in this instance, fellow HCI researchers at the Open University.

External participants were primarily included to help refine card sort and interview protocol. Given that they were interviewed mid-way through my own process of sense making, they however also provided new perspective, and the issues they highlighted broadened my own understanding, sensitising me to potential dynamics within the discussion list. I do not make direct comparison between the constructs produced by community members and those of external participants. It presents a potentially interesting dimension, but requires broader polling of external participants and thorough treatment to genuinely add value. In three cases follow up interviews were further conducted with participants from the community to clarify statements that had been recorded. The sorts elicit both the personal constructs of participants, and very rich interview data to the extent that cards function as elicitation device. The outcomes of the card sort are also triangulated with the content analysis of previous phase. This is reported in Section 5.3.

The case study uses complementary methods for each stage of work as already described. While more detail is provided later, where the research is reported on, this section provides an overview of methodological choices - in particular how these relate to the theoretical framework and epistemological position of this research.

3.4.1 Exploratory analysis

Braun and Clarke (2006) report that exploratory thematic analysis is often used in early stages of interpretive research - though the authors consider it a valid method in its own right given sufficient attention to the inductive process. They define a “theme” as a concept representing some level of “patterned response or meaning” in the data set, and further that is important in relation to the research question. To this extent, as Braun points out, thematic analysis is effectively embedded in many forms of textual analysis such as discourse analysis or grounded theory. The point is well illustrated by Adams’ (2008) frequent references to a ‘thematic approach’ in grounded theory case study. Mason (2002) conversely uses thematic analysis independently to do textual analysis that is “more contextually aware, flexible, rather than trying to develop an entire ontology” (p.166). The risk of the latter approach is that thematic analysis - applied lightly - leaves a poor record of the inductive process and therefore has been criticised as a form of qualitative analysis where in some cases “anything goes” (Braun & Clarke, 2006). Given the exploratory nature of this stage of work - the flexibility and open-ended nature of thematic analysis was considered exactly appropriate.

I also compiled basic statistics of interaction. This gave an impression of the level, as well as distribution of participation: how often were messages posted, and how representative was communication of the community overall. Further, accepting that themes identified were still very rough they enabled me to identify what proportion of communication was apportioned where. The objective of the exploratory process is to understand what aspects of the case most strongly relate to the research questions, and to aid the design of more detailed and robust analysis.

In the literature review, I discussed networked models of technology, and particularly Kling' s Socio-Technical Interaction Network (STIN) approach (Kling et al., 2003) in some depth. While I conducted STIN modelling informally as part of the exploratory analysis, the results are not reported here. I have however included a summary of the work in Appendix 2 to the extent that this none the less informs subsequent work. I found the approach useful to model interaction at high level. However, the process engaged with the relations implied as a result of communication, but not so much the content of exchanges. It also required me to extensively define 'roles' relatively early in the exploration of the case, which was not in keeping with a grounded approach. I found any roles I 'imported' from theory to model the context did little to unlock the dynamics of interaction I was most interested in. STIN models describe structural aspects of the socio-technical network by modelling the relations between roles or nodes. This further proved troublesome in the context of community governance where the structure was open to question, and very likely dynamic and context dependant. The strict network approach was effectively limited in the extent to which it could describe both the context that the network was embedded in, and the detailed role of technology in mediating relations. While I was interested in the extent to which particular affordances of the technology for example advantaged or disadvantaged forms of communicative behaviour, STIN conceptualised technology as an actor, or a node within the network. As reported in Chapter Two, I none the less draw significantly on the theory underlying the STIN approach in my framing of the role of technology.

3.4.2 Content analysis and grounded theory

Having established a basic overview of interaction and subsequently reflected on initial 'themes' in the light of theory, the next research step involved doing more detailed analysis of the content of email archives.

Generally authors make the distinction between two forms of textual analysis - content and discourse analysis (Rugg & Petre, 2006; Wilson, 1993). Content analysis “allows that the text may stand alone ... and that the words themselves speak its meaning” (Truex, 1996, p.1). From this follows the assumption that intention and meaning are discoverable in the frequency with which words or idioms occur. Wilson (1993) however cites common criticism - that content analysis “decontextualises text from the discourse” and so loses much of its meaning. Rugg and Petre (2006) propose that discourse analysis is more concerned with activities and structures than content analysis. Gill (2000) in turn takes a critical linguistics perspective - her central argument is that discourse analysis is concerned with the text/discourse itself rather than any objective reality "beyond" or behind the text. For example, rather than being concerned with the incidence of feminism inferred through a text, discourse analysis would be concerned with how feminists "construct" a particular aspect of their world through the text. Gill refers to this as a concern with rhetorical structure. Put differently, discourse analysis presumes “that meanings are embedded in layers of contexts, negotiated interpretations and lifeworld knowledge” (Truex, 1996, p.1).

Truex (1996) proposes this difference has technical implications in the interpretation of the notion of the “content variable” used during analysis. Like content analysis, discourse or conversation analysis makes use of “... a variable that partitions a set of all recording units into mutually exclusive classes.” (Krippendorff, 2004, p. 88) However, discourse analysis does not apply predetermined or fixed content variables - they are emergent - and the unit of analysis, instead of a single utterance, may be as long as an entire conversation (Truex, 1996). While, as Rugg and Petre (2006) point out, in reality the use and definitions of discourse and content analysis overlap, the various distinctions highlight aspects of the approach relevant to this study. It follows from this summary that discourse analysis is more likely to produce the level of analysis required.

Grounded theory (Glaser & Strauss, 1977) is perhaps one of the most well developed methodologies within which discourse analysis is conducted, and is accordingly able to provide solid methodological guidance (Urquhart, Lehmann, & Myers, 2009). Its roots in symbolic interactionism (Heath & Cowley, 2004) are sympathetic with a constructionist approach insofar as the latter proposes that “social interactions create meaning, and [that the] shaping of society via shared meaning predominates over the effect of society on individuals.” (p.142) Suddaby (2006) proposes that accordingly grounded theory sets out to research the production of meanings used in real social settings to address the interpretive realities of actors. He argues, however, that it is not intended as a descriptive method - grounded theory does not present raw data, but abstracts to higher levels of theory. In this sense it serves a particular purpose in the context of this research - to ground interpretation in the text of a case and show a clearer audit trail of the inductive process - but is not entirely suited to interpretive case study work if applied fully. Stake (1995) argues that it is exactly by being exposed to the rich narrative of case data that readers are able to make their own interpretation and be part of the process of “naturalistic generalisation.” The task of the “writer/researcher is to assist the reader to arrive at high-quality understandings...the analysis and interpretation of researchers needs to be paralleled by that of readers” (p.88).

For this reason I opt not to follow the detailed process of grounded theory as much as to draw on it for guidance for what is known as ‘open coding’ (Adams et al., 2008) - to identify concepts and categories in case data. From here the results are then discussed in a manner more customary in case study work. In the terminology of grounded theory, the “unit of analysis” that I use is an email list message, analysed within the context of a ‘conversation’ - a group of related messages. The coding process involves making multiple reviews of the chronologically arranged archive, at first to develop a set of message codes and to identify conversations, and then to associate relevant codes from the set with each

message in the archive. I subsequently investigate how groups of conversations have similar codes associated. From this emerges the higher-level structure of interactions - what I have referred to as patterns of 'governance conversation'. Codes were not applied exclusively - any individual message might be tagged by more than one code, and some of the codes are considered 'auxiliary', providing modifying information valuable to later interpretation rather than purely describing content. The process follows one of the foundational principles of grounded theory - constant comparison (Adams et al., 2008; Suddaby, 2006). As new messages are encountered and codes either extended or added, the researcher reflects on past work: how new codes fit within the overall theoretical framework - and potentially apply to content already coded.

A second principle of grounded theory, that of theoretical sampling (Adams et al., 2008; Suddaby, 2006), is not applied within this round of analysis since the entire archive is coded. However, the broader research process follows this principle - for example in the selection of interview participants and data samples in the next stage of work. One disadvantage of discourse analysis - much as with basic thematic analysis - is that it relies heavily on the interpretation of the researcher. The following stage of research attempts to mitigate this by conducting a series of in depth interviews to triangulate interpretations with the personal constructs (Kelly, 2003) of users themselves.

3.4.3 Interviews and card sort

To investigate the findings of discourse analysis in more detail, in particular to establish what interpretation community members themselves make of what had been observed, individuals were interviewed about a selection of messages from the discussion archive.

One useful perspective, when seeking the interpretation of others, is Kelly's (2003) personal construct theory. Kelly proposes that people evolve systems of relational

constructs through which they interpret the world and anticipate the outcomes of events.

“[T]he assumption is that whatever nature may be, or howsoever the quest for truth will turn out in the end, the events we face today are subject to as great a variety of construction as our wits will enable us to contrive” (p.3). The core of the notion is that behaviour is governed by our interpretation of events, in turn produced by the personal constructs we have built from experience. He notes that constructs are open to revision, much as eliciting them may lead to a temporary snapshot of someone’s perspective of a situation. Kelly also highlights one of the key challenges when attempting to understand an individual’s system of constructs: “A person may successively employ a variety of construction subsystems which are inferentially incompatible with each other” (p.13). In other words, constructs are not always logically consistent and so it may be misleading to present a static and partial view of a person’s constructs within a domain.

The elicitation techniques most closely associated with personal construct theory are card sorts, laddering and the repertory grid technique (Rugg & Petre, 2006). I discuss elements of these only to the extent that they are used in the research. As with grounded theory, the techniques are used to support what is in the first place an interpretive case study, and so are modified to suit the context.

Card sorts are most often used to elicit structured knowledge (Jonassen, Beissner, & Yacci, 1993) - for example to determine a “cultural domain” by sorting constructs into cultural groupings (what belongs, what not). The card sort technique is often combined with laddering (Rugg & Petre, 2006) to elicit higher order concepts. I had initially set out to use just this combination - doing card sorts to elicit domain constructs, and then employing laddering to expand on these. For this purpose 30 messages were selected from the lists archive and printed on card to be sortable. The material was theoretically sampled (Suddaby, 2006) to be representative of the “patterns of conversation” that had been

proposed in the previous phase of research, while also giving a good cross section of authors and types of contribution. Messages were also chosen not to be impractically long for the exercise.

A series of pilot tests quickly established that a full card sort with 30 messages would be impractical. Messages took too long to read, and so produced very few sorts (and accordingly few constructs). I doubted community members would have patience to do more than one full round. Further, in practice, the participant would scan two or three cards, pick the facet along which they sort the rest of the cards, and continue the sort by pattern matching without reflecting on the principle of organisation. Most of the interview participant's time was spent in silence, reading, with no time to conduct laddering or more in depth discussion.

As an adaptive measure, a triadic card sort (Rugg & McGeorge, 1997) was accordingly adapted from the repertory grid technique. The triad sort has participants select 3 messages from the sample at random for each round of sorting and discussion. Each sort then requires that they identify a bi-polar construct (Tan & Hunter, 2002) – some dimension by which two of the messages might be considered similar, while the third could be considered opposite. It may for example be that two messages seem friendly in tone, while the third appears combative. The example construct might accordingly be labelled 'tone' – with the polar dimensions of 'friendly' versus 'combative'. Participants were also requested to vocalise their thoughts as they worked. For the purpose of this study, the researcher extended the card sort protocol to engage in discussion of the constructs produced - or of any other point the participant had raised in relation.

This produced two levels of data: by sorting and comparing messages participants produced "personal constructs" (Kelly, 2003) reflecting their interpretation of online

interactions, and which could be used as the conceptual frame for further content analysis; at the same time, the in depth discussion of the material, as well as participants' rationale for sorting decisions, produced rich interpretive data. To this extent, the messages functioned as an elicitation device in the same way that photo elicitation interviews use visual material (Harper, 2002) - to remind the participant of the specifics of an event or interaction. The process was ideal in that it allowed multiple sorts - and rather than simple pattern matching, it encouraged participants to think critically about interactions without implying there was anything specific to be 'critical of'. Constructs, as well as open-ended comments, were associated with particular card id's, and so could be triangulated with the results of earlier rounds of discourse analysis.

I report in more detail on the operational detail of the card sort in Section 5.3.2.

3.4.4 Summary of the three stages of data gathering and analysis

I provided an overview of the objectives of the three stages of work in section 1.2.3, and have just reported in more detail on the proposed methodology of each. While I return in more detail to the objectives, method, inputs and outputs of each stage in chapter 5, this section makes a brief summary – particularly focussing on how the stages relate to, or build upon one another. In the language of the structured case framework – each 'stage' represents an iterative research cycle including data collection, analysis, interpretation and synthesis. In particular, the objectives of each successive stage are informed by the outcomes of the previous stage of work considered in the light of literature (synthesis) - an evolving theoretical framework. To not pre-empt theoretical discussion in this chapter, the points below focus largely on methodological aspects. At the end of each major section of Chapter 5 I do however discuss theoretical aspects in more depth.

Stage 1

Objective

Establish a foundational description of the community's online interaction to inform the design of further stages of work.

Questions

- What is the overall level of participation, and how is this distributed over residents?
- Who participates and what roles do they have in terms of local governance?
- What do participants talk about, and how might discussions contribute to governance?

Inputs

- A relational database containing all community list messages between April 2009 and June 2010.
- Background case study data on demographics, governance arrangements etc.
- Preliminary interview data.

Methods

Quantitative analysis of interactions and thematic content analysis of the discussion archive.

Outputs

- Statistics showing levels of online participation relative to population.
- Statistics showing distribution of participants, as well as description of top participants to each list.
- Initial set of thematic content codes and statistical breakdown of content types on the lists.

Stage 2

Objective

Conduct detailed content analysis of the discussion archive.

Questions

- How might one characterize the underlying dynamics of communication?
- Are there patterns or significant features that might be observed in conversations?
- How might these features/dynamics impact local governance?

Inputs

- Content codes from stage 1.
- Message archive database, annotated with content codes from stage 1.
- Statistics related to participation from stage 1.
- Additional background interviews.

Methods

Content analysis: develop a refined set of content codes and then apply codes to individual messages. Consider the incidence of codes in the context of threads of conversation, as well as in terms of contributors.

Outputs

- A refined set of content codes.
- Archive of discussions with messages individually coded, further annotated.
- Description of potential conversational patterns/dynamics at the level of ‘threads’ of conversation.
- Content codes assigned to individual participants (at hand of their message contributions).

Stage 3

Objective

Gather the perspective of residents on the discussion lists, and reflect on this in light of work in stage 1 and 2. Triangulate my interpretation of patterns/dynamics of conversation with their perspectives.

Questions

- What do residents find important or significant about the discussion lists?
- What interpretations do residents make of the online interactions that contribute to the dynamics/patterns that I describe during stage 2?
- How do the lists contribute to local governance, in their view?

Inputs

- Description of participation levels, as well as distribution and individual style of contribution from stages 1 and 2. This informs the theoretical sampling of interview participants.
- Description of themes (stage 1) and patterns of conversation (stage2). This informs my selection of messages to be used during card sort interviews, as well as further prompting questions.
- Field notes, transcripts of meetings, and additional interviews aid the interpretation of results.

Methods

Triadic card sort, combined with loosely structured interviews at hand of a selection of list messages.

Outputs

- Interviews provide interpretive data in the form of recordings and detailed interview notes. Interview data is stored in a relational database, cross-referenced with message samples and interview participants.

- Database of participant constructs (each recorded as a bi-polar statement), as well as detailed notes on the meanings participants attach to constructs. Data stored in a relational database, cross-referenced with messages samples and interview participants.

To summarise how the stages of work inform one another: Stage 1 establishes an exploratory description of interactions, but also provides initial analysis of the discussion archive to form the basis of coding in stage 2. During stage 2, I conduct more detailed content analysis, specialising the content codes derived from stage 1. I also add detail to the characterisation that I make of contributors during stage 1, not just describing who contributes, but also the style of contribution that participants have. In stage 3, I triangulate and extend my own interpretations with those of residents. Interviews provide feedback on 30 messages from the discussion archive, sampled to be representative of conversational patterns observed in stage 2. This allows me to verify or amend my own interpretation of the patterns I describe. Additionally, the constructs generated by participants - supplemented with rich interpretive data describing the constructs, their intention and impact on governance - expand my understanding of interaction observed during stages 1 and 2.

3.5 Data sources and their management

The study draws mainly on archived primary data - the records of online discussions in two closely related email lists over a period of 15 months. Text analysis was performed on the archive of 684 messages, though basic quantitative measures also inform the work. For this purpose the archive was imported to a relational database. In addition to message content, records included the date, author and subject heading, as well as threading information (from which conversations could be inferred). The database also provided the ability to attach keywords to individual messages (after initial rounds of content analysis) so that

messages could be grouped/filtered by keyword. Each message was further assigned a unique 'id' to be able to consistently reference during successive phases of analysis.

While I was able to draw informally on first hand experience as a result of my long-term residence in the community, I kept field notes in a research journal for the duration of this study. These comprised a combination of observations on first person interactions; notes on list messages as they were received (spanning three years rather than only the 15 months that were analysed in more detail); as well as containing detailed notes on community meetings that had been attended during the research period. The formal minutes of all community meetings were also collected in digital format.

Digital audio recordings were made of all formal interviews - except in a few rare cases where participants opted not to be recorded. Hand written notes of key points/events during an interview made recorded data easier to identify and retrieve. The note taking protocol involved taking down the recording timestamp for each major point. Because recordings could later be accessed on computer, the entire recording was not transcribed. Instead, sections were transcribed selectively on the basis of the notes as sections emerged as relevant. This allowed a large volume of material to be referenced efficiently - with the possibility of going back to a participant's original words where this proved pertinent to analysis.

A similar recording system was subsequently used for card sort interviews. A more detailed account is made in the relevant section of how 30 messages were theoretically sampled from the discussion archive. Each message then was printed on card for the purpose of interviews (example in Appendix 1.3). The researcher recorded details of each card sort on a data sheet (example in Appendix 1.4) - which included the relevant card id's, constructs produced by the sort, as well as notes about open comments made by the

participant. This data was transcribed and recorded in a second database - referencing the relevant records in the original database of list messages. As a result, card sort data could be cross-referenced with the email archive and the data produced by earlier content analysis. Where needed, an interview/card sort recording could then be directly accessed to refer verbatim to a participant's comments. Not only did the collection of sources provide rich data from which to draw conclusions - but the relational links between data sets made it possible to triangulate (Jick, 1979) between sources.

3.6 Ethical considerations

With regards to research ethics, I considered the planned research in light of the fundamental principle that 'no harm should be likely to come to any person as a result of the research.' I judged that no harm could be reasonably foreseen, and accordingly submitted a request for approval to the Human Participants and Materials Ethics Committee of the Open University. Approval was granted after I could show compliance with six components of the Open University ethical principles for research involving human participants (Open University, 2006) - details are briefly recounted below.

3.6.1 Compliance with protocol

I engaged the Ethics Committee of the Open University as soon as I had sufficient detail to be able to commit to a more detailed protocol relating to data security and ethical involvement of participants. Final approval was granted in Oct 2010.

3.6.2 Informed consent

This requires that participants "opt-in" prior to being involved as research subjects, and that they are made aware of potential risks and implications of being participants. In the case of interviews, this consent was obtained in the form of a signed consent form as part

of the interview protocol. However, to the extent that the research method was ethnographic, that I made field notes and also analysis of the public email archive, the archived interactions of potentially hundreds of people, it was clearly not be feasible to obtain consent from each individual. I obtained consent from the chair of the local ratepayers association, and made it generally known I was conducting the research.

3.6.3 Openness and honesty

The nature of my research does not require me to be secretive or misleading about the work. Details were disclosed before I engage participants, either at the individual or community level, without potentially compromising outcomes. Results may also be made available, particularly to participants of more in-depth studies.

3.6.4 Protection from harm

There is little potential that my research might directly harm any individual – other than the risk that personal data is revealed if confidentiality is breached, or data misappropriated. A risk assessment was conducted to cover potential eventualities, and it was concluded that maintaining confidentiality was the largest concern.

3.6.5 Confidentiality

I have been careful to not disclose the identities of participants – and to limit the likelihood of ‘discovery’ of the community under investigation. This has required special care, since the communities might be indirectly identified from case study material that I present. Information stored about individuals comprised their name, address, and contact details, a code specifying the reason they were selected for the exercise (see section above on sampling) and a unique participant code used to associate a participant with their anonymised session data (outcome of card sort and transcribed recording). The data captured during the card sorting exercise is not ordinarily interpretable as personal data as

it comprises a series of 'codes' documenting the way in which the sort items have been grouped by the participant. All data was stored on a secure laptop computer (Apple MacBook). In addition to low-level password protection, the machine has a highly secure encrypted store where the data is stored. When accessed, the data is not replicated elsewhere, and so remains secure.

3.6.7 Professional codes of ethics

There are no professional codes of ethics, beyond those provided by the Open University, which I am formally bound to. I am however aware that various professional organisations, e.g. the British Psychological Society (British Psychology Society, 2006), publish codes of ethics which are relevant to my work. The Open University code of ethics was however developed in reference to the most significant of these and I therefore consider my thorough engagement with the OU ethics committee sufficient in this regard.

4. Case Description

In this chapter I provide an overview of the community at the centre of this research, the local governance structures, as well as the history of the use of communication technologies and how these relate to local governance. Subsequent rounds of analysis (presented in Chapters 5 and 6) give further case details - offering more detailed descriptions of community processes as they emerged from evidence.

4.1 Community description

The case comprises a community of approximately 1200 residents, on the outskirts of a large city in South Africa. Geographically, it might be called a village rather than a suburb or neighbourhood, given that it is 15km outside the city's urban sprawl, and 40km from the city centre.

Because of its position on the coast, in a scenic location with access to the sea and mountains, the village has been a popular holiday destination for at least the last century. As recently as 1970, there were however only some 60 permanent residents - an account confirmed by contemporary photographs showing a small number of basic cottages near the popular beach. Because of its perceived remoteness, as well as very limited local services, property in the area was relatively inexpensive and the community attracted an eclectic mix of people. Many were attracted to what they termed an 'alternative' lifestyle in a semi rural area, away from the bustle of the city and in closer proximity to nature. Early residents included writers, fishermen, artists and crafts people - all choosing to make a living without daily contact with the city. Others - perhaps less invested in an 'alternative' lifestyle - worked in neighbouring suburbs, or a military facility nearby, and simply found the village an affordable, if somewhat out of the way place to live. The population was further comprised of retirees, and a significant component of seasonal

holidaymakers. Eclectic as the demographic appeared, early residents give accounts of a strong sense of community, and the village gained a reputation for its rustic, bohemian atmosphere.

Over the last two decades, the village had however grown significantly. At the time of writing, the permanent resident population had increased more than 10 fold and very few of the originally demarcated residential stands remained undeveloped. The growth was partly the result of the bohemian reputation and attractive location - but also significantly influenced by the growth of the nearby city. As the city centre became more dense and suburbs sprawled, local beach areas bordering it became expensive, crowded and lost their original rustic character. People began looking to live further afield - though within reach of the services and facilities of the city. Perceptions of the relative remoteness of areas such as the case village further changed as the city encroached on them, with people becoming willing to commute and also more work opportunities becoming available nearby.

In view of the steady influx of new residents, it had become a significant governance issue within the case community to manage local growth and maintain the perceived character of the village. Municipal planning regulations - enacted with strong sanction from the community - limited the extent of property development in the village to boundaries established in the 1960's. Regulations further limited development to free standing, single residence dwellings with strict guidelines on the style and particularly scale of development. This contained growth and maintained a degree of economic homogeneity as no low cost, high density or social housing would be developed in the area. Property values subsequently increased as a result of relative scarcity and new demand. The planning provisions however also had the unintended consequence that many of the original rustic cottages were renovated or demolished to build larger, modern homes - steadily changing

the character of the village that the guidelines sought to protect. While there appeared to be a degree of consensus *within* the community that additional growth was undesirable, opinions diverged significantly on what might be deemed appropriate where development did take place. Property development was a contentious local issue that at times polarised the community along unexpected lines of thinking.

There were also changes to the social composition of the community as a result of population growth and the increased cost of becoming established in the village. One might be tempted to seek the distinction between long standing residents as bohemian artists, and the newcomers as “wealthy city types”. Some long established residents reportedly did, many moving further afield to maintain a lifestyle and values they considered already lost to the village. My own evaluation suggests the mix of residents remained as eclectic as ever. There were professionals - lawyers, doctors, and technical specialists - with lives divided between the village and the city, but mixed with a wide range of people who had work or lifestyles that offered the flexibility to be away from the city, or who could make a living locally as before. It also became apparent that relative newcomers held a similar range of values to those decrying the change. Regardless of their length of occupation, residents appeared similarly invested to retain the character of the village they had come to live in. What that character signified in practice was harder to pin down - the notion of an ‘alternative’, ‘bohemian’ or ‘rustic’ lifestyle meant divergent things to people. Certainly, given the small population and relatively new history, it would be misleading to speak of established ‘segments’ of local society from a socio-cultural or governance perspective. Rather, as I had also encountered in the literature relating to community in Section 2.1.2, I observed shifting interest groups, and an evolving, necessarily partially held sense of what community stands for. This was an important aspect of the community to consider with regard to this study - what role online deliberation potentially played in this process of forming a sense of local identity, and from it the enactment of governance.

I described in section 1.2.2 that the case community was culturally relatively homogenous - in spite of the range of values and lifestyles described thus far. I have outlined a number of case specific factors above - such as the relative homogeneity of local housing options, the limited local employment and relative remoteness from the city - which contribute to social homogeneity in particular ways. A further significant aspect of cultural homogeneity has roots in the apartheid legacy of South Africa - the forced segregation of society from the late 1800's under colonial rule, right up to the 1980's. Under various guises, areas were demarcated for habitation by one ethnic group or another. Officially the locality of the case community was designated as an area for whites, which directly affected its population up till the early 90's. Under apartheid, people were physically relocated to enact the policy, but by all accounts, relocations did not occur within the case community - though largely because it was established relatively recently, in a social landscape where the segregation had already demarcated boundaries. This meant not only that it was unlikely for a more diverse range of people to permanently settle in the village until the 1990s (regardless of the politically progressive values held by some residents), but that surrounding communities were also disintegrated. The process not only concentrated people by race, but inevitably by economic situation. As a result, despite the fact that the apartheid system ended two decades ago, re-integration had been relatively slow, particularly in rural areas where there was less economic mobility. (While this study did not set out to study interaction between communities, or seek out the issues of social re-integration that are undeniably important in the South African context, this background informs the demographics and context of the case and has therefore recounted. I have already discussed the choice of this particular case, and implications for a critical approach in section 3.3.2.)

One feature of the post-apartheid landscape that impacts upon culture, and upon participation in governance at all levels, is the emergence of English as the de-facto

'official' language. Whilst a significant proportion (though less than half) of the community population speak Afrikaans, English is spoken as the first or strong second language of nearly the whole community, including residents whose origins include South America, Scandinavia, and Eastern Europe.

Of further significance to the case is the historical proclamation of protected nature areas literally surrounding the village. The area is known for extraordinarily high natural diversity and endemism, and forms part of what is known as the "Cape Floristic Region," the smallest of the six recognised floral kingdoms of the world. What were working farms at the beginning of the 20th century were progressively decommissioned as a result, the land variously donated or bought by the national parks authority, and fenced in to become part of a nature reserve. The natural surroundings are strongly valued by residents of the village - many offered this as the most significant reason for settling there. The official protection of surrounding natural heritage, and its proclamation as public land, was largely well received. A few years before this study was conducted, the community had accordingly voted to become a "conservation village," a largely self-proclaimed title that was an affirmation of their values, rather than having any official status or direct governance implications. As the management of the reserve was however formalised over time under the national parks agency, management practices were perceived to have become authoritarian, distant and heavy handed. Members of the community found themselves clashing with the authority, in particular over issues that were not confined to the protected area. These included the control of wildfire, the eradication of alien plant species and the management of wildlife species that were able to move in and out of the reserve. There was also increasing tension over the management of resources in the buffer zone between village and reserve - areas that the community considered shared resources - the local beach, an adjoining picnic area and neighbouring wetland for example.

For decades, the village was effectively 'off the radar' in terms of local government, being variously under the jurisdiction of more established neighbouring municipal centres, but largely left to conduct their own affairs. This was strongly encouraged by residents, who perceived the laissez faire state of governance as central to the lifestyle they enjoyed. An informal residents association was instituted to conduct community affairs, and to occasionally interact with local municipalities or the parks authority when this was required. During the 1990's the local municipalities were however unified regionally under a single city-wide municipality, with the local offices retaining only limited administrative functions. While this brought the village more formally into municipal government, it now fell under a central municipality serving 3.7 million inhabitants over an area of 1500km². Decision making and the management of services were centralised in the city. The strongest form of local representation were ward councillors, who each none the less had several of the once local municipal areas as their 'ward'. The community found themselves in a situation common to South Africa - because of geographic distances and limited human and financial resources, formal government could afford only limited capacity at local level.

To some degree, the role of the residents association changed as the power distance with local government increased. Their role increasingly included representing or campaigning for the interests of the community at central municipal level. The earlier residents governance association was formalised into a "Residents and Ratepayers Association" (RRA), a structure formally recognised by the city municipality. From mainly co-ordinating affairs internal to the community, their role expanded to interact with municipal officials almost daily on matters ranging from infrastructure development to the delivery of basic and social services. In many cases, the RRA none-the-less assumed direct responsibility to co-ordinate and execute local governance actions. It is worth noting also that the potential political implications of a 'homeowners' association was sidestepped by

an organisational title that was deliberately inclusive - it represents those who own property and are ratepayers, but resident tenants are afforded an equal vote and opportunity to voice their opinion.

In practice, at the time of the study the business of the RRA was conducted by a committee of five to eight volunteers who were elected at an annual general meeting of the community. The election process was a relatively informal affair. Residents presented their nominations for committee members directly at the annual residents' meeting, where the committee was summarily appointed. In reality there were often fewer people willing to commit to do the work than there were positions. In rare cases - most often in choosing the committee chair, the de-facto local mayor - a vote was cast with the attendees of the meeting considered a quorum. The position of chairperson rotated annually, usually it was not filled by the same person year on year. During the three years that the process was monitored for the purpose of this study, there seemed to be strong consensus over the available choices. The committee subsequently had bi-monthly meetings, open to all residents and ratepayers to attend; though in reality the meetings were rarely attended by anyone but committee members. From a critical social perspective, the residents committee did not appear so much to be a 'base of power' as a relatively loosely co-ordinated group of volunteers, instituted by popular consent. There appeared to be no excluded minority amongst residents within the village, but rather simply residents who chose not to be 'part of the crowd,' for example by not attending meetings, and so were self-excluded from decision making.

4.2 The role of technology

For some years prior to this study, the RRA had experimented with the use of web-based tools set up by community volunteers: to better co-ordinate their work, involve residents

more actively and provide for a more communicative governing platform. Over a period of five years, the efforts included several iterations of a village website, an online forum, a map based incident reporting tool and several email lists. The experimental, somewhat ad hoc approach may have contributed to the fact that most of these tools had become redundant or had fallen into disuse when this study was conducted. I do not focus on the acceptance of technology per se, and so details are supplied mainly as background to the study of online deliberation.

An updated community website had been created in 2007, but its content was static and formal, providing little useful information and no input to governance. The site included an image gallery, an events section, and a few documents to download, but the content was not updated. After the earlier version of the community site had fallen into disrepair when its maintainer relocated, there appeared to be resistance to web based initiatives that required actively maintained content. The new site was built by a programmer who lived in the village, but who was not actively involved in governance otherwise - and those who were more engaged did not feel compelled to take on the task of adding online content. An associated online discussion forum further proved unsuccessful. This was partly because it was uncertain “whose” list it was, a question that was raised on the forum several times; and partly because the forum required participants to sign in to see updates: it did not send notifications out. A record of interaction shows that few people took the time to visit more than once. Often a question would be posted only to receive a reply many weeks later. The discussion lost impetus, the forum was not maintained, and finally the list became overrun with spam messages. The independent incident reporting tool was still in use at the time of this study, but had very little traffic. Few people saw its value, and no one took the trouble to use it to report either crime or wildlife sightings.

My overview of the community demographic suggests that these failures could not be attributed to a lack of technical expertise - residents have a high level of education, many work remotely and so are well versed at using web-based technology such as forums. These people are able to support less technically proficient friends and neighbours in turn - for example older people - to make use of the level of technology relevant to this study. My preliminary account rather suggests the difficulty of sustaining a public good - with or without the use of technology. I accordingly based my investigation on a group of email discussion lists - formally maintained by the RRA - which had become the hub of community communication and which appeared to be the tools most prominently used to support local governance. These included a main residents' email list, as well as two subsidiary lists which I discuss in a little more detail later. The discussion lists afforded unsophisticated interaction, using basic broadcast email as the mode of communication. They were however easy to use - a participant simply needed to reply to any email they received from the list - and (significantly) the lists 'pushed' communication to residents. The choice to use a 'push' mechanism was in direct response of the failure of the web forum.

The RRA committee had set up the residents email list primarily to improve their own communicative capacity and the list was initially simply managed as an outgoing address list in the Gmail (Google, n.d.) account of the chairperson of the RRA committee. Residents however soon started requesting the moderator to forward their own messages – at first to post event announcements or notices, and once a precedent had been established, to engage others in conversation related to governance. Within 8 months, the returning message volume had increased sufficiently that the RRA initiative functioned to all extents as a two-way mailing list. The functionality was subsequently formalised under a new Google email address, the email "from" header was changed to reflect the association's identity and an invitation was sent to residents to use the new, "official" email list.

Subscription management was none the less conducted manually and new residents were co-opted by the RRA moderators, by being automatically subscribed.

The list was moderated by chair of RRA, with assistance of at least one other resident. In interviews, it was clearly acknowledged that the chair was none the less the final authority in matters of moderation. In each of the various technical implementations, messages were forwarded to moderators for approval before being broadcast to the subscribers. This is a feature of the technology that clearly has strong significance for this study at multiple levels, and so will be keenly investigated. To do the moderation was likely to involve a fair amount of work, but it also afforded moderators significant insight on and input to the flow of local communication. The Networked Neighbourhoods study (Flouch & Harris, 2010), which I referenced as a closely related study, discusses anonymity and trust as key themes - in particular the issues that arise out of anonymous, or even pseudonymous comment. In this case however, there is full disclosure - all messages are posted with the name and email details of the sender, and anonymous messages are not tolerated as a matter of policy. This was strongly enforced by regular members of the list where ambiguity had occurred. Trust however remains an issue with regard to moderation.

Soon after the residents list was formally announced, a discussion relating to feral baboons' raiding of houses generated sufficient conflict (and message volume) that many list members complained to the moderators, some unsubscribing from the list. As mechanism to deal with the increased message volume, and in an attempt to reduce what was perceived as "noise" on the main list, a new topic specific list was set up by a community volunteer. Near the end of this study, two more such lists had been set up under similar circumstances. In the earlier rounds of analysis of this study, I take the main list and its first offshoot into account - for ease of reference labelled the RRA and Baboon lists - though further discussion considers the complete set.

4.2.1 Concluding thoughts on technology

I discussed in earlier sections that this study focuses where off-line and on-line deliberation between residents directly concerns questions of local governance, much as other conversations provided interpretive context. I can accordingly clarify that 'online' refers to deliberation on the community lists - the study does not take private email into account, though I recognise this is a further factor in local governance. Given the demographic outline, one might argue the case presents an example of "neighbourhood democracy" (Barber, 2003; Leighninger, 2008). However, it should be distinguished from studies of online neighbourhood democracy, or more broadly online deliberative governance, where the research focus is purely on the interaction of citizens with government, and where policy formulation in its various forms is both central object and output of communication. I have clarified that the online discussion spaces were conceived, set up and are maintained entirely as a spontaneous volunteer effort by members of the community. Formal government, e.g. the city municipality, are neither the principal object of, nor significant participants in the conversations. Dialogue is between residents and largely concerns how they and their residents association might directly resolve local issues. Accordingly, it is likely that residents understand the problems under discussion well, they are personally affected and therefore likely motivated to participate in governance action. To the extent that conversations recognise the mandate or authority of external role players in issues, residents use the list to co-ordinate internally and then to provide locally consolidated input.

5 Evidence & analysis

In Chapter 3, I outlined the research design this study uses - moving in three stages from early exploratory work to more focussed analysis and theory building, with each iteration reflected back to an evolving theoretical framework, and providing input to the next. I accordingly report on each of the three stages below, in each case highlighting the research goals and how these relate to the conceptual framework. I then discuss implementation detail of the methods used, present results and analysis and finally reflect on results in light of theory.

5.1 First stage: initial exploration

5.1.1 Goals and initial conceptual framework

The first stage of data gathering and analysis presents a basic statistical breakdown of membership and contribution, as well as looking at the sort of topics discussed on the lists and their distribution. It is intended to be exploratory, a first step to providing a grounded framing of the research problem and more specific questions to evaluate in subsequent rounds of work.

This round of work is exploratory, aiming to provide descriptive detail rather than well-developed explanation. Nonetheless, I pay attention to the socio-technical framing I had proposed. In particular - how might the introduction of technology have altered the matrix of cost and opportunity associated with local governance, and do these changes potentially relate to the observations I make in terms of direct deliberative democracy? With reference to the theory of direct deliberative democracy, the exploratory work was intended to investigate aspects of each of the constituent terms in the study context. In relation to the fundamental principles of 'Democracy': what proportion of the community are

participating, who is participating and how uniform or 'equal' is the participation? With regard to 'Deliberation': How frequently were messages posted, what range of topics or issues featured in discussion, and how does participation compare to offline meetings as most significant alternative channel for deliberation? Is local governance more 'Direct' as a result - to what extent is interaction truly resident-to-resident as opposed to featuring 'representation' of one form or another?

5.1.2 Method

This stage of analysis focuses on 15 months' interaction between April 2009 and June 2010, taking in the main ratepayers association list (RRA list) and a subsequent topical list dealing with the management of raiding baboons - hence referred to as the 'Baboon list'.

The 433 message email archive was exported from an email programme and imported to a relational database to expedite analysis. The full email header was imported with content - in other words it was possible to tell which list a message was sent to, who the author was, the date sent, the subject, as well as accessing content and any attachments. In cases where the message was "forwarded" to the list by a moderator on behalf of someone, the name signed at the bottom of the email was recorded as the sender.

In addition to compiling basic statistics, exploratory work involved reading through the archive in chronological order, and making notes of interactions that appeared significant in light of the established theoretical framework. Keywords (open codes) were further assigned to identify the topic of conversation. These included for example whether a conversation could be considered governance related in the first place (nearly half of posts were not - but rather they were community advertisements, event notices etc.), and more detail about the topic or issue that was under discussion.

5.1.3 Participation: basic statistics

The RRA list had 277 subscribers in July 2009. Though exact numbers for July 2009 are not available for the Baboon list, there were 306 confirmed members 6 months later. The RRA provided an estimate of 1200 residents in the community, constituting approximately 400 households - who would often share one subscription to the list. The RRA chair accordingly estimated that at least 50% of households were represented by a subscriber on one or both lists. This was at least partly the result of proactive subscription of new and existing residents by moderators. The member base of the baboon list had been populated from the RRA list - minus a few subscribers that had explicitly objected to this. Some users unsubscribed within its first weeks, but the Baboon list also gained membership as it became the 'official' channel to be informed about, but also to contribute to the Baboon issue.

Though it was hard to determine accurately from subscription details, the gender ratio of subscribers to each list was very near equal. A more recent count in 2012 e.g. gave 291 female subscribers versus 293 male. One interesting phenomenon was the high number of 'combined' subscriptions – where partners, typically husband and wife, would share a single email address and combine contribution. This is more likely a feature of the email use of the participants (at home) than the list technology, since people subscribed with their existing email details. In many cases a shared account was used by couples who chose to disaggregate work email from what they considered 'social' or private use. In a few instances however, particularly older couples, a family literally shared access to a computer and email address. There were no comprehensive statistics available on the age of subscribers, but an informal assessment suggested that the age demographic of subscribers followed that of the community – except that there were no children

participating. Both young adults and senior citizens were well represented – as was also reflected in the composition of the ratepayers committee itself.

5.1.3.1 Level and distribution of contribution

Over the 15 month period covered by this analysis, there were 240 messages posted by 86 contributors in the RRA list. The Baboon list received nearly the same number - 193 messages by 84 contributors. Figure 1 shows the distribution of this contribution over users, a power law curve as has frequently been reported for participation online (Hindman, 2008; Shirky, 2003). The top 10 posters had contributed 50% of messages in the case of the Baboon list, 58% in the case of the RRA.

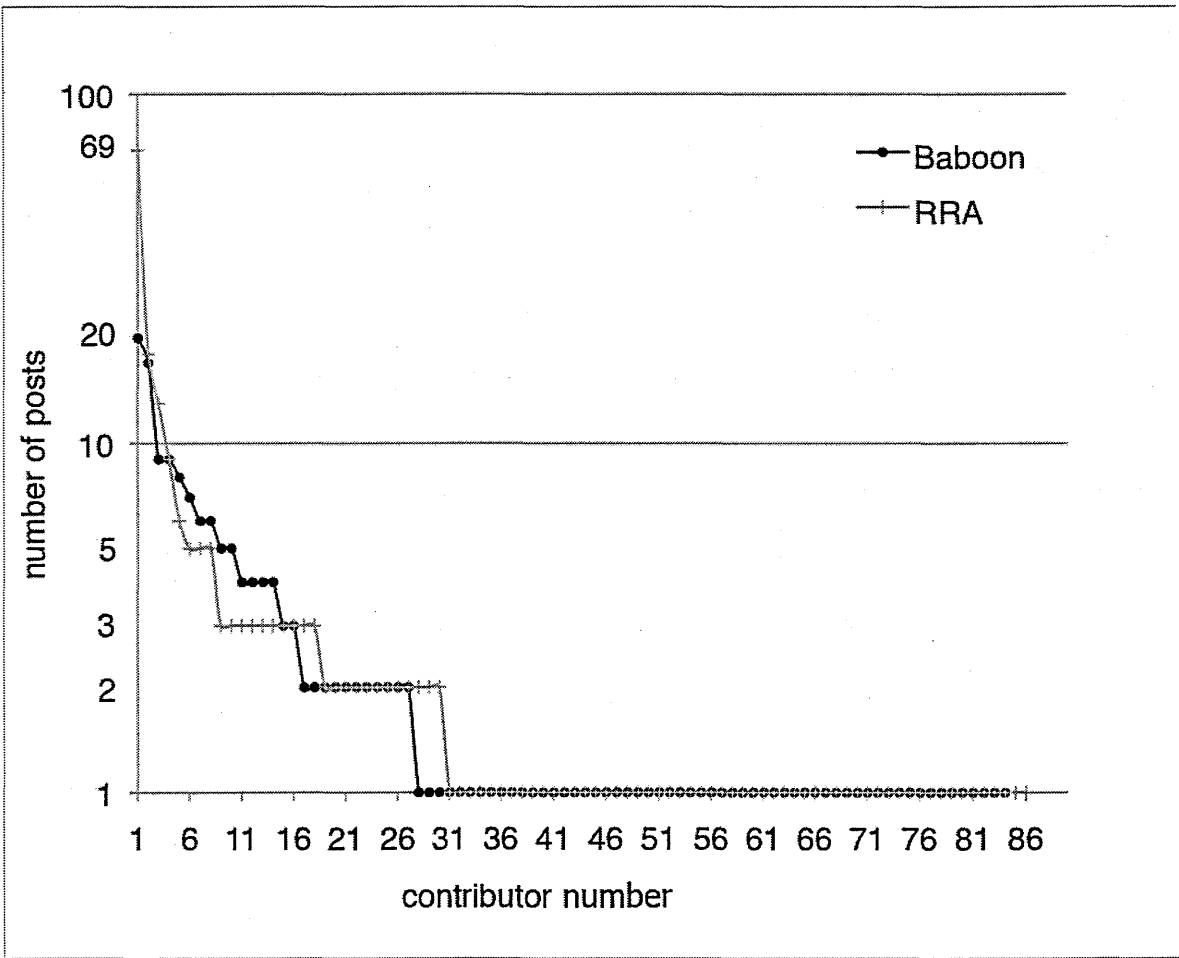


Figure 1 - Contribution of members over 15 months in two lists

Table 1 presents a closer look at the top ten contributors in each list. While the overall membership strongly overlaps, the two lists largely have different top contributors. Because it is used as a reporting tool for governance matters, the RRA list attracts a relatively higher contribution from those in ‘official’ roles – the chairperson of the residents association, co-ordinators of the neighbourhood watch, the fire service and wildlife management.

Table 1 - Composition of top 10 contributors to each list

Baboon list			RRA list		
ID	Posts	Role	ID	Posts	Role
1	20	Resident	2	69	Moderator, chairperson RRA
2	17	Moderator, chairperson RRA¹	10	18	Neighbourhood watch
3	9	RRA committee member ²	-	13	Anonymous (various)
4	9	Tech supporting list^{1,3}	11	9	Neighbourhood watch
5	8	Resident	12	6	Co-ordinator volunteer fire service
6	7	Resident	4	5	Tech supporting list
-	6	Anonymous (various)	13	5	Resident
7	6	Resident	14	5	Resident
8	5	Co-ordinator baboon management	15	3	Neighbourhood watch
9	5	Resident	16	3	Resident

Notes:

- 1 - Contributors in bold are common to both top 10 lists, also indicated by shared ID attribute
- 2 - Future RRA chair
- 3 - Contributions in personal capacity, not technical

Analysing the participation statistics for gender bias suggests that the RRA list is marginally male dominated – 55% of contributors were male, as were 6 of the top 10 contributors, but the statistics are inconclusive, especially given the number of shared subscriptions. In so far as there may be a bias, it reflects in part the gender bias within the local community structures – the chair people of the residents association, neighbourhood watch and fire service were for example all male. In the baboon list where there were fewer established roles, the participation ratio was even – 51% of contributors were female, as were half of the top 10 contributors. The top contributor to the list overall was female. This proposes that the online lists do not predispose to/against gender bias per se,

but do perpetuate biases as they may exist in the community. Given the small sample of this study, the statistics are interesting to note, but not considered strong enough to draw reliable conclusions from.

5.1.4 Deliberation topics: initial content analysis

Messages that were not directly governance related such as small ads, lost and found notices and general event notices were deliberately omitted from the analysis. These contributions potentially increase the value and relevance of the lists, but I consider it outside the scope of this study to report on the additional dimension. The subsequent database of messages was then reviewed in chronological order. I tagged messages adjacent in time and similar by topic to identify conversations, and similarly linked conversations that appeared to have been re-animated after extended gaps in time. Examples include the discussion of a new waste removal system; a debate about aggressive, uncontrolled dogs; co-ordinating resident feedback to external stakeholder process; and a short exchange about a forthcoming community meeting.

In total, 433 messages had been posted to the community lists during the 15 month period of this study. To form an initial impression of the overall composition, messages were broadly categorised during a first review of the list archive. This led to a set of categories that were not particularly symmetrical, some referring to topics (baboon, crime) where discussion had been sustained for some time, others to broad forms of contribution (notice, event) to group brief exchanges. The exercise none the less proved useful as an initial descriptive mechanism.

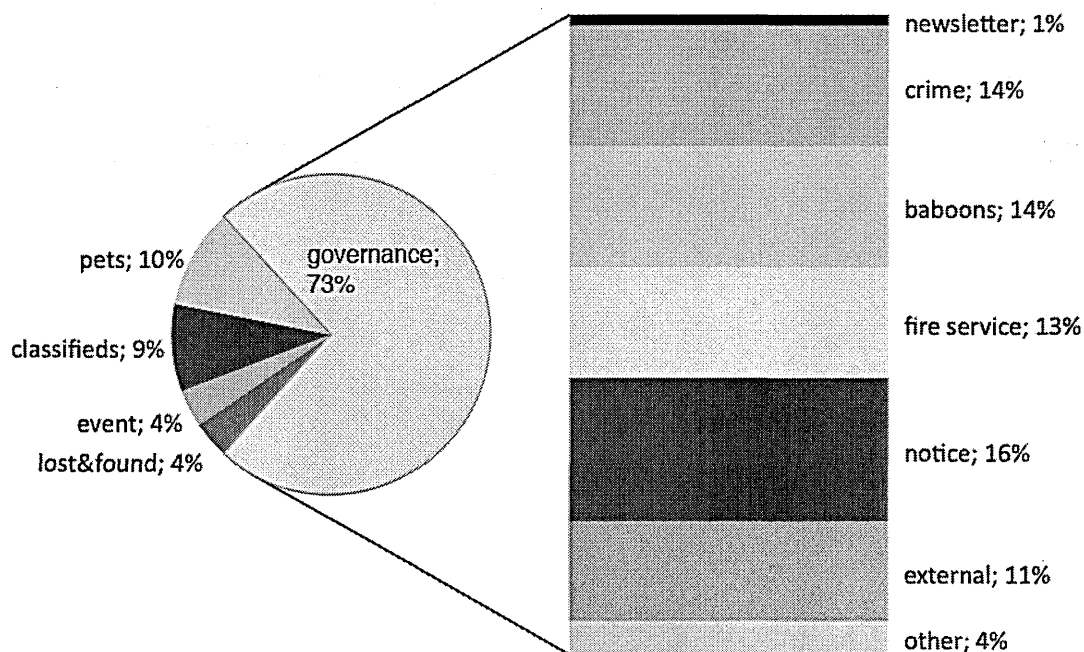


Figure 2 - RRA list topical breakdown

Figure 2 shows the relative proportion of topics or message subjects, assigned by open coding, within the archive of 79 messages contributed to the RRA list between April and June 2009. I report on this 3 month slice of the data as some topics were split into sub lists directly thereafter, while earlier the list was still gathering momentum. 73% of contributions over this period could be classified as governance related – including notices by the RRA, messages relating to governance matters beyond the community (external), crime and the management of human-baboon conflict. The remaining was a combination of event and ‘lost-and-found’ notices, small ads (classifieds) and discussions relating to pets.

The results further indicate that lists appeared to have a different tone - possibly related to the difference in top contributors to each. The RRA list included more ‘official’ notices, and participants tended to word messages using the neutral tone expected of a relatively formal environment. The Baboon list by contrast was entirely different - a higher

proportion of top contributors were residents with no formal role in local governance. It was also mostly un-moderated, allowing more open and emotional, though frequently combative interaction that unravelled into personal arguments between members at times. The next stage of the research that I report on investigates the various forms of contribution to the two lists more closely.

5.1.5 Reflection on stage one

Overall, the preliminary quantitative data suggests that the lists presented a viable complement to offline engagement, a collection of communication channels that were able to engage a broader segment of residents more directly in local governance deliberation than may otherwise have been the case. The email based communication tools appeared sufficiently flexible to support a range of communication – from simple notices to complex deliberation. The medium also presented a low barrier to entry for new subscribers, since most were already email users. I'd noted that in some cases a subscription to the list was shared – e.g. by a married couple. While shared access very likely has an impact on how often email is used, even the most frequent posters contributed less than one message per week on average. The pace of asynchronous email based communication mitigated to some extent the impact of shared access. It further appeared that shared access was often used to indicate a form of solidarity, with messages clearly 'signed off' by both parties – or even as a family.

That 50% of households were believed to be represented by a member on the list was possibly the result of assertive recruitment – the list moderator subscribed existing residents from an RRA address list, and added new residents as soon as their email details were available. In other words, the availability of email significantly lowered the cost of including a large proportion of residents in communication. However, in view of reports in the literature of the difficulty of maintaining membership and participation (Beenen et al.,

2005; Butler, 2001), the fact that email was 'at hand' could only partially explain that nearly a third of the members of each list subsequently engaged in governance related deliberation, and that membership of the lists grew significantly after inception. My observations suggest a combination of factors, not least the pertinence that issues under deliberation had to residents.

Over 15 months, 433 messages had been contributed that were directly related to governance. Though this suggests a contribution rate of near one message per day, in reality there were bursts of conversation followed by periods of silence. At its peak, the 'Baboon list' received ten messages per day, though one to four per day were more common during periods of activity. While the lists could be said to have improved the opportunity for residents to communicate, many subscribers expressed their unhappiness with what they thought was excessive traffic on the list. The new form of communication brought with it new costs of participation, and for some participants, an average of four messages per day was sufficient to warrant complaint. As a result moderators attempted to slow the pace of discussion by delaying message approval at times. There was also some deliberation about separating or filtering messages further into topic orientated sub lists beyond what had already been done. In response to this the moderators maintained that the RRA list was valuable to the extent that it had a broad local audience rather than being split into self interested channels, it was a 'public good' that required work from moderators as much as participants to maintain. This suggests that there was a balance to be found between value and the cost, the trouble being that neither value nor cost appeared to be uniformly perceived.

I expected that message contribution would follow a power law distribution – this has been reported frequently of online interaction (Butler, 2001; Hindman, 2008; Shirky, 2003), and corroborates my observation of governance discussion lists at regional level (Van Der

Merwe & Meehan, 2009). I did note that the two lists attracted different participants, and that even those in 'official positions' locally were in reality community volunteers. Further, it would not necessarily be true to equate the more frequent participation of some users with a stronger voice in relation to governance. My earlier observations of a regional case study suggested that the top contributors add impetus or dynamism to a list, while the remaining participants add important diversity of perspective, making contributions which may have equally significant impact (Van Der Merwe & Meehan, 2009). In terms of potential gender bias, it appears that participation in the 'official' RRA list followed what bias was evident in local society – largely reflected in who took positions of officialdom. Interestingly, the more 'open' baboon list attracted very even participation of men and women – suggesting that there was opportunity to engage a more equal demographic where discussion was not implicitly structured around the traditional domains of governance. The small samples in this case however limit the extent to which observations of the demographics of participants can be generalised, or provide reliable analysis.

It is also important to consider that in the local context these lists do not function in isolation, but act as supplementary channels to offline conversation and face-to-face meetings. That said, the quantitative data suggests stronger participation on the discussion list than for example during the annual general meeting (AGM) of the RRA, the most significant opportunity that residents have to provide input to governance offline. In 2009 there were 38 residents at the meeting, 5 of whom were RRA committee members. In the 2.5 hour meeting, 30 minutes near the end were allocated to 'matters arising', the only opportunity for those not reporting on official business to speak. Less than half those present chose to make use of the opportunity. There were residents who communicated prominently in both venues, in particular the chairperson of the RRA who effectively coordinated both channels, though I noted that there were others, stalwarts online, who had not even attended. I noted significant crossover of conversations online and offline –

deliberations that had originated on the list are continued smoothly at the AGM, and issues arising from the meeting are taken up online thereafter. As a result the offline meeting seemed less a matter of the RRA committee reporting back after a years' work behind closed doors, than of a continued conversation.

In terms of the questions I posed of direct deliberative democracy, the results propose some answers, but also generate further questions.

The statistics of participation suggest that a larger segment of the population are engaged in governance communication than would otherwise have been the case - in other words that the lists potentially afford greater democratic 'equality'. Whilst being careful to avoid directly equating the frequency of contribution with extent or significance of input to governance, it was possible to conclude that, as a result of online communication, there were not only a few additional loud voices, but also more voices overall.

It is also worth observing that while the extent of individual contributions follows the (expected) power law distribution, the results show that each of the lists had different top contributors, and that many of these were residents who would otherwise have had a less prominent voice. Thus, the power law distribution seems independent of any single member of the online community and, instead, any topic has its own 'most frequent' contributors. This observation fits with the notion that it is not just the technology that shifts the matrix of costs and opportunities associated with online participation, but also the specific and changing contexts that give rise to issues in the community.

Further questions needed to be answered to understand the extent to which additional (online) participants in the governance process potentially relate to a more 'Direct' form of governance. There is clear reference to the RRA as representative body in the main list,

and the RRA chair is its most frequent contributor. However, most of the top contributors to each list are neither on the RRA committee, nor in any official governance related position. The lists further offered a longer time span for contribution, in turn affording a broader range of topics to be covered in addition to presenting additional speaking turns. It is important to add also that the RRA in itself represents a relatively 'direct' form of governance in view of its relation to formal government. The RRA committee represents the interests of citizens at a relatively fine-grained scale. It would be interesting to determine, beyond statistics of participation, what the impact of online participation was on the 'Directness' of governance. What was the content of messages, who determined what was 'on the table' to discuss in the first place, and what potential impact did it have on local decisions?

The key to understanding these questions appears to lie in gaining a deeper understanding of the online 'Deliberation' itself. Initial exploration gave some understanding of the topics covered, but how might one characterise the character and dynamics of deliberation afforded by the list? This implies that a more nuanced analysis of message content would be beneficial, and prompts a closer look at the patterns of contribution that might emerge from detailed discourse analysis. Preliminary statistics suggest the 'online deliberation' is really constituted of a number of overlapping conversations - are there different types of governance conversation, and what are their goals? In this exploratory phase I developed a sense that participants themselves had divergent ideas of what is appropriate, and what constitutes the objectives of their deliberation. Reflecting back to theory, this relates to Gutmann and Thompson's on the various dimensions of democratic deliberation (Gutmann & Thompson, 2004). Deliberation might serve instrumentally to resolve issues, but also expressively to make potentially emotive arguments about the values that underlie the discourse itself. It might help to develop a degree of consensus, or exactly to expose disagreement and subsequently find a pluralistic balance between

conflicting interests. In the next stage of research, I set out to evaluate these dimensions of the local online deliberation with specific reference to the affordances of the socio-technical system constituted (in part) of the community discussion lists.

5.2 Second stage: discourse analysis

5.2.1 Goals and initial conceptual framework

In view of the questions raised during the first stage of analysis, the second stage of work focuses on a more detailed discourse analysis. The goal within this stage is to understand the deliberative dynamics of this particular online environment more clearly. Beyond the topics covered, what sorts of conversations are conducted online, and accordingly, what is their potential contribution to governance? The approach is based on the observation in the first stage of analysis that the online deliberation can be characterised as a number of overlapping, sometimes on-going conversations that differ both in topic and potentially in character.

As in the previous stage of work, I take a Socio-technical Systems (STS) perspective on the role of technology, using the explanatory mechanism of ‘Transaction Costs’ to unravel the role of technology in some of the patterns I observe. Do the affordances of the email list privilege or disadvantage particular forms of contribution and conversation? From the STS perspective, better characterising the forms of communication that participants engage in is a potential first step towards understanding the roles that are associated with the online system. Rather than imposing a static set of roles on participants, this approach acknowledges that users change their role or position in the socio-technical network depending on conversational context, as revealed earlier.

In terms of the earlier conceptual frame of direct deliberative democracy, this section will focus most directly on the ‘Deliberative’ aspect, though I expect the outcomes to have significant impact on how both ‘Directness’ and fundamental principles of ‘Democracy’ are perceived in the case context. I propose to analyse the results of discourse analysis -

potentially a number of patterns or themes within the overall deliberation - in light of the deliberative dimensions proposed by Gutmann and Thompson (2004): Might some of the governance conversations be instrumental, while others are predominantly expressive - or is there a sequence in conversation that follows from one state to another? Also, what role do online conversations play in the developing of either a consensual or a pluralist understanding of the local governance issues? A clearer understanding of these questions, in light of a more nuanced description of the deliberation itself, may go some way to analysing the potential impact of online deliberation on local governance.

Furthermore, given the finding that communication is not distributed equally over participants, I had proposed that the volume of interaction does not necessarily equate to a participant's ultimate input to governance. This section sets out to understand whether frequent participants are inclined to contribute in particular ways, becoming engaged in different forms of online conversation. This will contribute to a clearer understanding of the role that individuals play in establishing the character and potentially the outcomes of online deliberation.

5.2.2 Method

During this stage of work, I iteratively developed a refined set of codes to characterise individual messages within discussion threads, not by topic as I had done in the first stage of work, but to establish the dynamics underlying contribution, and then applied the coding system to all messages in the discussion archive. I subsequently reflect on the outcomes in the light of supporting data and follow up interviews. A number of patterns of 'governance conversation' are presented as an analytical device, the result of grouping threads of conversation that share particular codes or attributes. The frequency of codes assigned to

the contributions of individual contributors is also investigated to establish the extent of their contribution to particular forms of interaction.

I discussed the theory and epistemological concerns related to discourse analysis in Chapter 3. To recap from the Method section on the practical implementation of the proposed analysis:

In the terminology of grounded theory, the “unit of analysis” that I used was an email list message, analysed within the context of a ‘conversation’ - a group of messages related by subject thread or topic of conversation. The coding process involved making multiple reviews of the chronologically arranged archive, at first to develop a set of open message codes and to identify conversations, and then to associate relevant codes with each message in the archive. My objective was to develop a set of codes that more accurately describe message content, and that were more consistently of the same semantic level (Rugg & McGeorge, 1997) than those introduced earlier. While the codes I used in the first round of analysis largely described topic, this round of work is concerned with the underlying function of a message at a more abstract level - to help understand the dynamics of interaction. After reflecting back to theory at the end of the previous stage, my objective was further to develop codes that, while they were grounded in the case, none the less made closer reference to the developing conceptual or theoretical frame.

While table 2 presents the set of content codes that was finally used to code the entire message archive, the initial set of codes I adopted included only the terms ‘problem information’, ‘solution information’ and ‘decision’. These were the result of reflecting on the first round of content analysis in light of the developing theoretical frame, and in light of the objective to describe the dynamics underlying, rather than purely the content of interactions. The set was expanded where I found the terms insufficient to describe messages I encountered, and the new codes recursively applied. For example, after

encountering a particularly heated exchange, I added the “flame” code to identify personal attacks or offensive messages. There were however also messages with strong emotive or normative content that I could not characterise as ‘flames’, but neither were they necessarily instances of problem or solution information being exchanged. After reflecting on the work of Gutmann & Thompson (2004), I opted to include the ‘expressive’ tag as I show in table 2. Similarly the collection of content codes was eventually expanded to include others such as ‘meta’, ‘co-ordination’ and ‘action’. The process of ‘open coding’, while none the less making reference to a theoretical framework, reflects the structured case research framework (Carroll & Swatman, 2000) very well. I do a first round of analysis (Section 5.1.4) with a broad idea of the theoretical framework informing analysis and no fixed codes. As an outcome of this, I embark on the next round of work with a small set of content codes – derived as much from theory as from the content itself. During successive rounds of work the collection of codes are expanded ‘bottom up’ – upon reflection of results in light of existing theoretical understandings, as well as the research questions I had set out to answer.

I consider the codes not so much an outcome in their own right but as an interpretive mechanism for further work. While terms are not all symmetrical, they are broadly at the same semantic level. I did not apply codes exclusively - in other words, any individual message might be tagged by more than one code, and some of the codes are considered ‘auxiliary’, providing modifying information valuable to later interpretation rather than purely describing content. The process further followed one of the foundational principles of grounded theory - constant comparison (Adams et al., 2008; Suddaby, 2006). As new messages were encountered and codes either extended or added, the results were compared to past work, considering how new codes fit within the overall theoretical framework and also apply to content already coded.

Table 2 - Second round message codes and their description

Code	Description
problem information	Communication supplying information about the issue under discussion, including e.g. identifying responsible parties, expressions of factual support.
solution information	Suggested solutions, further information about these, as well as feedback after potential implementation; also e.g. a problem owner acknowledging responsibility.
co-ordination	Co-ordination of discussion, or of the online process.
action	An offer to act, call to action, co-ordinating physical action, creating a petition etc.
decision	A message that indicates public decision-making, including voting behaviour.
normative *	Statements that affirm how things should or ought to be, how to value them, which things are good or bad, which actions are right or wrong.
responsive	A message which makes direct reference to another message or author, agreeing, amplifying, refuting etc.
meta	Messages about the list and its moderation.
external	Related to issues/parties outside the community.
flame	Personal attacks, ad hominem remarks, sarcastic or deliberately offensive messages.

Notes:

* To better align analysis to the theoretical framework, the “normative” tag was subsequently revised to “expressive”, which I considered more inclusive in that it also covered pure expressions of feeling, such as anger and frustration, or of respect for the position of another in the dialogue (Gutmann & Thompson, 2004).

Having applied codes to all messages in the discussion archive of the RRA and Baboon lists, I subsequently investigated where different conversations could be grouped due to assignment of similar codes. From this, considered in light of the overall context (as well as further message attributes), emerges a view of the higher-level structure of interactions. I established what sorts of contributions were made over time and whether these followed particular patterns - what I have referred to as patterns of ‘governance conversation’.

The frequency of assigned codes is not statistically analysed in this study. To do so in a set of messages that are neither randomly sampled nor statistically representative of a larger population would not be valid. Instead the codes encourage the researcher to examine the underlying structure of exchanges, to ask what some exchanges have in common, and what distinguishes them from others. The codes also present a useful mechanism to test incipient interpretations: for example, given that two sets of threads seem to be similar, how are the codes assigned to them similar or different? In some instances the codes help to identify a particular pattern; in others a pattern becomes evident during the coding process and associated constant comparison. The codes further help to describe communication dynamics after the fact, in a manner that is consistent with other patterns observed. To this extent my methodological approach has commonalities with forms of discourse analysis that presume “that meanings are embedded in layers of contexts, negotiated interpretations and lifeworld knowledge” (Truex, 1996, p.1). From an interpretive perspective - while the coding process and the device of identifying patterns of conversation serve to make the process of inferential reasoning explicit, neither codes nor patterns are in themselves treated as social “facts” inherent in the exchanges.

5.2.3 Patterns of conversation

The following section presents some of the high level patterns of interaction I observed. Given the size of the case sample, and the very specific scope of my study, the patterns are not put forward as either an absolute or complete typology. Instead, they are mainly intended to characterise the sorts of interactions I observed in the case, as a mechanism to support further analysis. It may none the less be that the patterns I describe are found in a range of similar contexts.

Over the entire archive of discussions, a timeline of code instances gave no immediate sense that there was a progression or any particular pattern within the dialogue. What I saw

instead was a mix of topics and styles of exchange – in effect several conversations happening at the same time. This was compounded by the asynchronous nature of contribution and relatively ad-hoc moderation, resulting in messages being posted to the list in batches rather than in real time as an argument unfolded. When the results were however disaggregated to look at threads of conversation in isolation, a clearer sense emerged of the dynamics of interaction. Five patterns of governance conversation were prominent in coded data, for ease of reference identified in turn as:

- *announcement*,
- *feedback exchange*,
- *stakeholder co-ordination*,
- *deliberative mediation* and
- *deliberative engagement*.

Nearly a third of messages were not so much part of a conversation online as individual notices and announcements, or requests for (off-list) feedback - each of which had typically been associated with the ‘problem information’ or ‘solution information’ codes. I referred to these as *announcements* and *feedback exchanges*.

Announcements included advertising a governance meeting, information on service schedules, a press release from the city municipality, or a message to create awareness of an issue. Particularly early in its existence, the main list was mostly used to broadcast announcements. In some cases the *announcements* generated replies – for example to show enthusiasm for an event, or to provide additional information - but did not involve the expression of differences of opinion, or an explicit evaluation of any sort. Though superficially announcements appeared purely instrumental, they nonetheless afforded the contributor an opportunity to frame an issue or action and implicitly present an opinion or value statement in the process.

Feedback exchanges included messages that solicited evaluations from list members of some or other aspect of governance, as well messages which provided ad hoc updates to fellow residents on the progress of an initiative. I made the distinction that, though *feedback exchanges* implied some form of reciprocation, these conversations also did not develop into dialogue on the list. Answers, if at all, were typically sent directly to the requesting party, who were not obliged to publish these, nor to engage in further online discussion. As an example, soon after the list was initiated, the RRA chairperson sent out a request for feedback on the performance of a third party contractor collecting recyclable waste. This generated no further discussion – with off-list feedback having been acknowledged, the issue was considered closed unless complaints were received.

From the remaining coded messages, several substantial threads of conversation were identified next for having high incidence of the ‘co-ordination’, together with the ‘external’ tags. These transpired to be instances of *stakeholder co-ordination*, the list being used to co-ordinate community feedback in an externally driven stakeholder process. Rather than primarily supporting deliberation within the community, the list was being used to provide a stronger voice to the community as a collective entity, a form of collusion to the extent that there was local consensus. This process involved a combination of information sharing, encouraging participation, arranging off-line events and ultimately submitting an appropriate, coordinated response. In one instance, the list facilitated feedback to an environmental management plan of the city municipality, which would have direct impact on residents’ access to a natural, protected area. In another, residents used the list to make collective response to a proposed property development in the wetland adjacent to the village. The development was unanimously disliked, though for divergent reasons, and the list afforded participants the opportunity to broaden their understanding of the potential impacts, and of the most appropriate and legally robust responses.

There were also threads of conversation which did seem to follow conventional deliberative development: an incident is reported, supported by others as problematic (or dismissed), a responsible party is identified and then public pressure or sanction applied to prompt action. What I labelled as *deliberative mediation* threads would progress from 'problem information' and 'normative' contributions, to 'solution information', followed by 'action' – though notably without the discussion going through a phase of 'decision' contributions. Issues addressed successfully by *deliberative mediation* were all relatively straight forward – that is there was a clear problem 'owner' and it could be resolved following one or two rounds of discussion, typically without involving significant normative debate or enduring conflict of opinion. Some months after the list had evolved to a many-to-many channel of communication, residents began using it to resolve what they perceived to be governance related problems. In one example, someone complained of being attacked by another household's stray dogs. This was quickly followed by emails from others - confirming the problem, identifying the owners and applying public pressure on them to act. While in this case the owners quickly acknowledged their responsibility and took action, in other cases the alleged culprits would engage online to negotiate either the true extent of the problem, or their role in its resolution.

In terms of the proposed theoretical framework, the first four patterns of conversation were characterised – if not at first – by developing consensus and a relatively high proportion of instrumental contribution. If there was conflict, it was not at the level of expressive (normative) statements. However, what remained of the discussion archive seemed to follow no such patterns. It was clear these conversations more often than not involved "wicked problems" (Rittel & Webber, 1973) – issues that were complex, included significant normative dimensions and which frequently lead to increased controversy following debate, rather than resolution. Typically the issues had an obvious and

significant impact on residents, but there were no known solutions and no clear problem owner. Discussion appeared to cycle through phases – at times dominated by heated normative discussion of the issue, at times by investigation of potential solutions or by reports of incident details. Overall, shifts in conversation occurred in response to posts on the list (the list became self propagating at times), but also to external events - the status of solutions being attempted, problem incidents. This meant that conversation did not follow a clear sequential pattern, appeared to be recursive, and the problem seemed to be no nearer resolution after months of deliberation. While there were several such instances in the list archive, the most exemplary case involved the on-going attempts to manage the destructive behaviour of a rogue troop of baboons. The baboons had taken to raiding houses for food, making frequent attacks and causing significant damage in the process. The incidents also threatened the wellbeing of the animals, an endangered and protected species, as they frequently injured themselves in the unfamiliar human environment. This provided strong motivation for local residents to attempt to resolve the problem, but also prompted significant expressive as well as instrumental debate about the most appropriate resolution. The issue quickly caused sufficient controversy for list moderators to move the discussion into a dedicated list – what I have referred to as the “Baboon list.” In spite of being dedicated to a single topic, the new list nonetheless generated 34% of overall message traffic during the 15 month measurement period of this study.

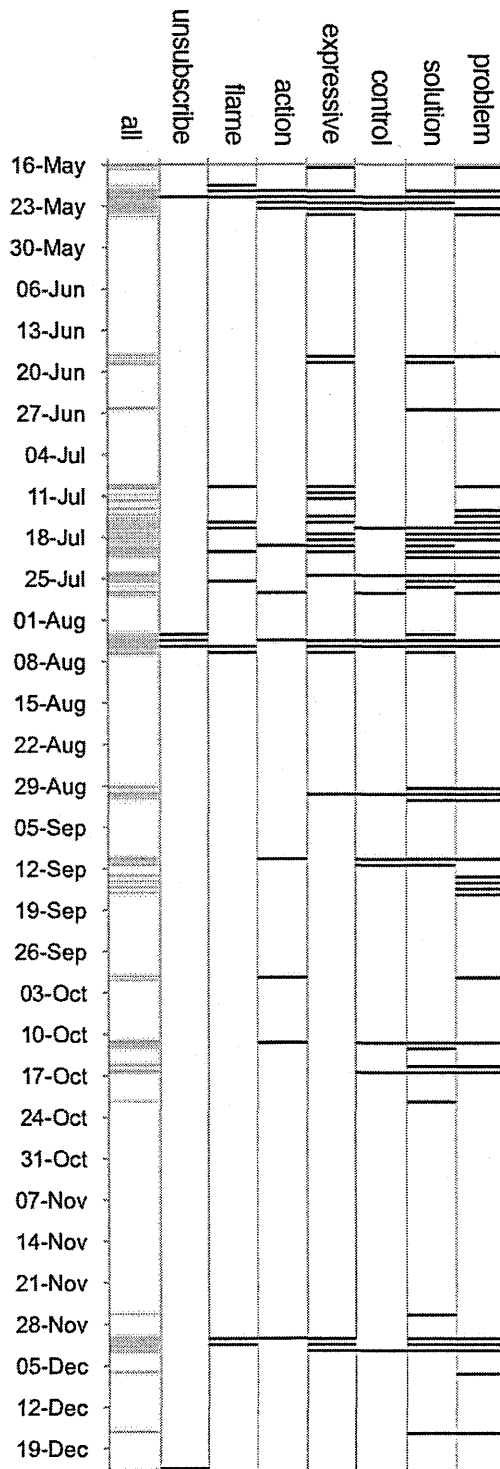


Figure 3 - Timeline of codes assigned to messages on the Baboon list

Figure 3 shows the occurrence of each of the codes assigned to the Baboon discussion over 8 months. The figure is included to illustrate one method that I used to analyse threads of conversation at hand of content codes – useful to be able to visualise potential patterns in the data. Each horizontal mark represents a single occurrence in time of the corresponding code listed on the column headings. The density of marks in the left most column, labelled “all”, gives an impression of the way in which this one thread of conversation would go through periods of peak activity. The dialogue was at times sustained for several weeks, followed by long silences as the problem temporarily abated, or participants apparently exhausted their motivation to contribute.

The sequence and relative composition of ‘problem information’, ‘solution information’ and ‘expressive’ contribution varied between the conversational episodes. For example, on the 16th of May, a participant made an expressive contribution relating to a problem. On the 23rd, this was followed by a ‘flame’ – an attacking post by another contributor. A brief (and ‘expressive’) exchange followed of problem descriptions, flames, possible solutions, as well as attempts to control dialogue or take action. At least one participant unsubscribed during the exchange, yet the issue appears unresolved, as the exchange ended with a participant making a final expressive re-statement of the problem soon after the 23rd of May. After period of relative quiet, a participant again made an expressive problem statement on the 9th of July. Expressive posts and flames followed this, some not directly addressing the problem, before an attempt was made to ‘control’ the deliberative process and discussion become more balanced between problem and solution orientated statements. In spite of a number of flames during the exchange, no one unsubscribed. Without making a detailed account of further exchanges, it is interesting to note how, after the 8th of August, discussion included fewer expressive exchanges and appeared to quieten down. First hand examination of the exchanges proposes that the conversation changes

tone and style based on who became involved as much as how the issue manifested at any particular time.

I also noted no messages in either list were tagged with the 'decision' code – in other words, there were no instances of overt decision-making online, nor for example voting behaviour on the lists. None the less there were several instances where participants were able to move from deliberation to (offline) action. This is discussed in more detail in the following section.

5.2.4 Types of contributor

The coded archive was further analysed to establish whether individual participants appeared to be driving specific sorts of conversation within the deliberation of wicked problems. Figure 4 shows the proportion of contributions tagged with each of the codes in the Baboon list.

Columns A and B compare the aggregated contributions by the top 10 contributors, with those of the other 74 contributors. Both columns show a relatively even spread of contributions focussing on the problem, possible solutions and expressive statements. The top 10 contributors appear to focus more strongly on potential solutions than the problem, make significantly more attempts to control the process, but are also responsible for almost all of the instances of flaming on the list. Overall, this presents the image of a small group of people more engaged with, or committed to, the issues under discussion than most. Demographically, they were however diverse: the top contributor was an yoga teacher and self proclaimed ‘pro life activist’, who had no formal role in the local governance process. The second and third most prolific contributors were respectively present and future chairs of the RRA – one a retired ecologist and the other a middle aged local tourism entrepreneur. The top ten further included two ICT specialists, an author, a massage therapist, a film producer, a retired housewife and a botanical consultant. Half were female and the ages of top contributors ranged from early 30’s to late 60’s. Columns 1-10 show the extent to which there is variation in style between individual contributors. Note the top ten here are the same as shown in table 1, column A, where there is more detail on their role in local governance. The top contributor (column 1) contributes most of the aggressively combative content (“flame”), frequently makes expressive statements – but makes no attempt to co-ordinate or initiate action. Contributions by the future chairperson

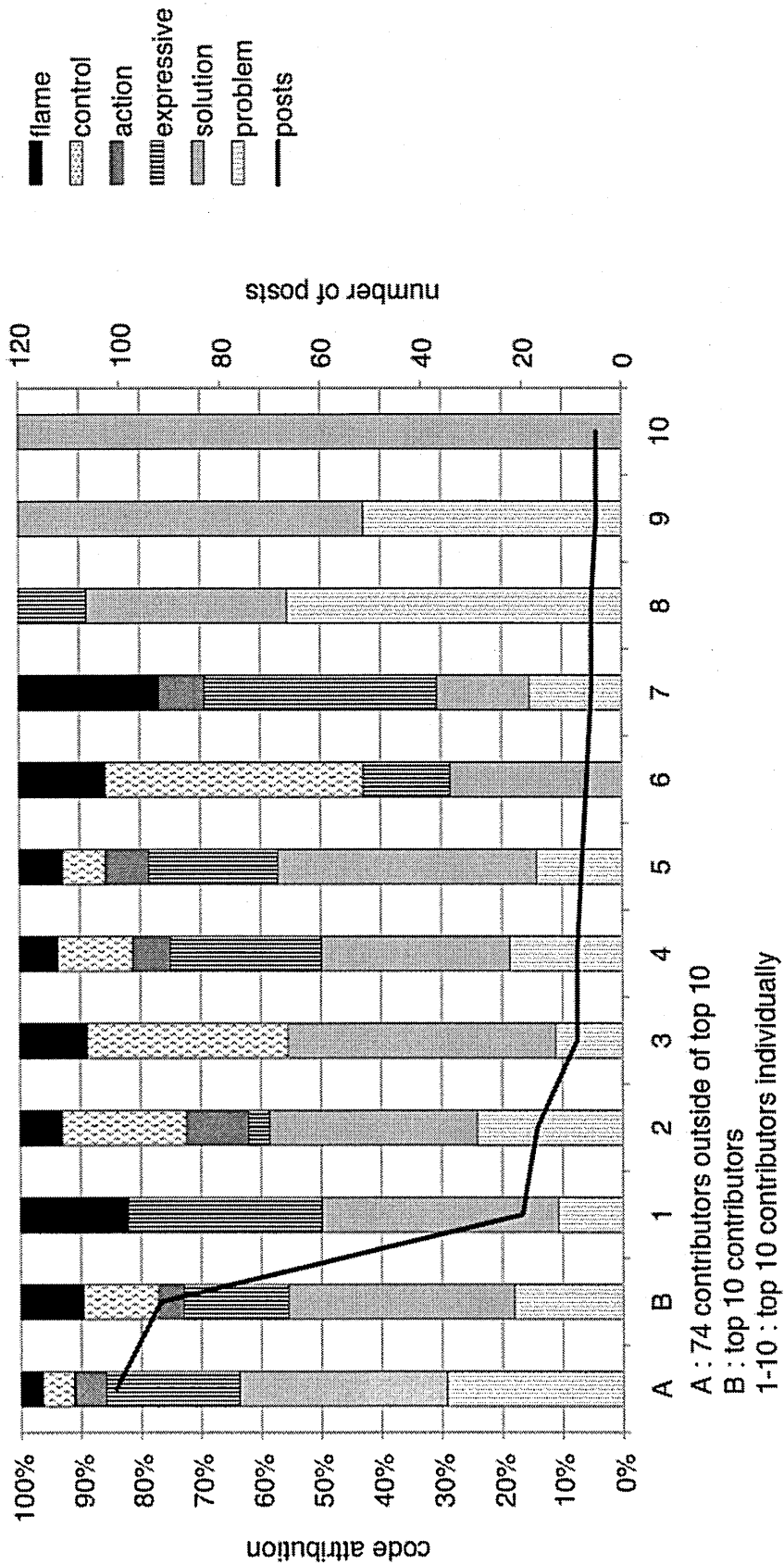


Figure 4 - Content codes attributed to top contributors

of the RRA (column 3) already involve attempts to control process, though without any expressive content, while neither the present (column 2) or future RRA chairperson can resist posting flames of their own. A resident formally assigned the role of managing the baboon conflict (column 9) in turn contributes very matter-of-factly, without apparent emotion or normative appeals. This proposes the style of contribution is likely determined as much by the individual as the role they take in governance.

5.2.5 Reflection on stage two

I have described already how ‘*announcement*’ and ‘*feedback exchange*’ communication contributed to the local governance process in spite of being short of deliberativeness in themselves. The two types of conversation did not involve the level of reciprocal discussion that indicated (or required) consensus, nor conversely expressed pluralism. Interactions shared information, provided opportunity for instrumental feedback and provided input to governance processes. As a result residents became directly involved in governance, and the residents association was encouraged to conduct its business in a responsive manner. These two patterns of conversation also most closely reflected the instrumental goals of the residents association when they set up the list: the lists were created, and are presently maintained, primarily to lower the coordinative cost (Cordella, & Simon, 1997) associated with local governance for members of the RRA committee. The RRA list was initially dominated by announcement and feedback contributions, with the RRA committee using it to share governance information, request feedback and keep residents informed of initiatives. Once the list was more formally established, the association directly invited residents to contribute along similar lines: *"You are very welcome to send emails to [the list] intended for the Association, or send us items to go out on the mailing list (village announcements, lost and found, but not commercial announcements)."*

In this case context, ‘*stakeholder coordination*’ conversations were predicated on the assumption that there was sufficient consensus to be able to coordinate a response. Rather than being an internal deliberation, what I observed was collusion – a case of ‘the community’ responding collectively to an external demand on the basis of shared instrumental and expressive goals. Sunstein (1999) discusses how such consensual dialogue has the potential to lead to more extreme opinions. In the examples I have

investigated from this case, the evidence suggests rather the shaping of an informed, possibly broadened consensus - though none the less differences of opinion persisted particularly on normative aspects of a case.

Though not intended by its creators, the list also proved instrumentally useful to resolve uncomplicated instances of conflict within the community, what I labelled '*deliberative mediation*'. Once a protocol for bi-directional communication had been established - not only between the civic association and residents, but between residents themselves - people appropriated the list to deal with what they perceive as governance problems. In several cases issues were so resolved which had been referred to the residents association, but which they were unable to resolve. Where several independent messages follow up an initial complaint, adding pressure on the problem owner to act, the social space appears to be very effective at motivating response. An email from the conversation I cited as an example reads: "*After ten years of living in [village], [street] has become a "No Go" [sic] area because of these same dogs. The youngest male, in particular, has threatened me on several occasions ... someone will have to take action before a child gets savaged.*" In this case, after 10 similar emails, the owners took action within a day. In '*deliberative mediation*', consensus was implicitly expressed, for example by the extent to which a complaint gained support, or there was agreement on who was the responsible party. Where this sort of conversation encountered pluralism, the discussion either died down, or evolved to '*deliberative engagement*'. In one example, residents deliberated over inconsiderate external lighting on several houses, after some of the lights had been vandalised. To some, the lights were bothersome and a waste of energy, in opposition to the values of a 'conservation village'; others considered the lights a necessary deterrent to crime. In light of the opposing, but relatively well reasoned and uncontroversial points of view, the discussion quickly died down. Parties on either side had exhausted their arguments and motivation to continue debate. However, where the baboon discussion met

a similar impasse, it escalated to more heated debate – most likely because the issue caused significant disturbance and directly affected a large number of residents.

I have already discussed that ‘*deliberative engagement*’ conversations are less clearly instrumental to governance than any of the others forms I had observed. The dialogue appears to become an end in itself - driven by controversy, by a contentious post, or by a renewed outbreak of the issue, rather than genuine attempts to resolve. There are multiple cycles of problem definition, discussion of solutions, normative debate - frequently re-treading well known territory without seeming to reach a conclusion or even development of discourse. It also generates significant work for moderators – for 9 months, the baboon discussion alone generated more messages than all other topics combined. In follow up interviews, the moderators confirmed they did not consider such conversations particularly constructive at resolving the issue, much as they recognise the conversations have an informing function. They further report that many list members unsubscribe after, or during confrontational debate, particularly where the discussion degrades to a personal attacks. One message to the email list simply reads: “*Please remove me (again) before I drown in this stuff.*”

The coding results indicate normative (or expressive) content in all forms of contribution – though in some cases more overt than others, and so more likely to constitute expressive deliberation. ‘Announcements’ were frequently accompanied by normative motivation, or facts augmented by normative statements. One invitation for example reads: “*As a conservation village, it would be great if we could encourage everyone to sign up for Earth Hour on Saturday.*” ‘Feedback exchanges’ on occasion included a normative interpretation of the facts presented, while in ‘stakeholder coordination’ interactions the conversation itself was less often expressive, than some of the arguments discussed at second hand. ‘*Deliberative mediation*’ involved normative statements to back up an initial problem

statement, to signal support – and in some cases to compel the problem owner to act. It is however ‘*deliberative engagement*’ conversations, the discussion of wicked problems, that provided the most significant opportunity for expressive dialogue. In the baboon related discussion, this included for example the values of community as conservation village, the competition between humans and other species, and the right to self-destination – to name but a selection. This more than often lead to discussion that was difficult to moderate, and had a tendency to become personal. At the height of an argument about baboon management, an email reads: “...[the problems are caused by] the weekend and holiday house owners, who don't read this and will do nothing about it!!!) so here is a good solution for the baboon lovers, why don't you chase all those people out first, right????? they caused it!!!.”

Not all participants agreed on the value of expressive dialogue - some considering it simply humorous, some sufficiently offended to unsubscribe: “*what a load of rubbish - please can we keep to baboons...this not a general forum for ranting and raving unless of course it concerns baboons! Whoever the moderator is should not let posts like this contaminate the discussion please.*” Others clearly indicated how highly they value the expressive dialogue: “*Since venturing into the cyberworld of public discussion, it's been an unaccustomed pleasure to receive responses from fellow residents whom I have never met! As such, then, this Forum and the baboon issue, generally, has the wonderful side-effect of representing a gathering place, a waterhole, if you like, such as our village, without its marketplace, does not have.*” The fact that a quarter of messages in the baboon conversation included overt normative content indicates the extent to which participants were compelled to engage in expressive discourse. Expressive discussion, at very least, establishes the range of values held within the community. This in turn formed a significant part of evaluating both the definition of the problem, and the potential solutions considered. I would argue that while ‘*announcement*’, ‘*feedback exchange*’ and

'stakeholder coordination' had served an obvious instrumental purpose, it was through the expressive content in *'deliberative mediation'* and *'deliberative engagement'* that the mailing list had evolved from a one-way channel of communication to something approaching an extension of the public sphere. The expressive communication particularly has value to a geographically co-located community - because there is expectation of continued association and a significant likelihood of first hand encounter.

An evaluation of expressive and instrumental contributions in each of the patterns is framed by the extent to which one considers decision-making the instrumental goal of deliberation. Presumably, for a deliberative decision to be made, some level of agreement is required. I have argued against the simplest form of aggregative consensus, in favour of a deliberative solution to be shaped from pluralism. In this case, it appears overt decision-making was absent in all five patterns of communication I identified. One might argue that the particular online space did not include sufficient mechanisms (such as automated polling) to facilitate aggregative decision-making. However, it is significant that protocols to collate input - as might be expected of a face-to-face meeting - had also not been employed in any of the discussions. In some patterns, such as *'announcement'* or *'feedback exchange'* I would argue that there is no need for collective decisions. In *'stakeholder coordination'* decision-making is not appropriate because engagement in the list is part of broader process - as in the case of the wetland development described earlier. During *'deliberative mediation'* issues appear to be resolved through more tacit forms of agreement - by the apparent support any one side of an issue gains. Finally, in case of wicked problems, decisions are by definition not as simple as putting a number of options to a vote.

To use the baboon discussion as an example - while the merits of potential solutions were repeatedly debated, a conclusive decision could not be made because the problem was

sufficiently complex and poorly understood that even experts could at best guess at the outcome of action. The participants further did not have the resources, nor the official sanction to carry out many of the proposed 'comprehensive' solutions – much less negotiate an agreement between at least three government agencies disowning their share of responsibility to find a resolution. The online deliberation did however lead to an informally co-ordinated, experimental approach to managing the issue - in some instances with improved outcomes. From the range of opinions, norms, problem incidents and potential remedies there gradually emerged a repertoire of arguments and candidate solutions. From these, consensus emerged amidst the pluralism that, at very least, it was in neither the humans' nor the baboons' interest that the animals remain in the village. As a result it became possible for groups to informally test solutions in a way that was self-regulating, without requiring unanimous decision. The ultimate outcome, though not finally resolving the issue, was an informal management strategy – improved reporting, measures to reduce the impact of raids, strategies to steer the troop back out of village once they arrive. I propose that the nature of deliberation on the discussion list was partly instrumental to the outcome: asynchronous communication (Wellman et al., 2003) meant that many residents had the opportunity to be part of an ongoing dialogue, without the community incurring the cost or complication of regular offline meetings this would otherwise have required. The responsiveness of the medium (Deuze, 2006) further made it possible for residents to report incidents accurately, directly after they occurred, as well as to provide immediate feedback on both proposed solutions, as well as experimental implementations. The relative anonymity of the medium (Pingree, Davies, & Gangadharan, 2009) also facilitated expressive, pluralist interactions which created sufficient common ground to enable some degree of collective action.

From the results presented in Figure 4 (the breakdown of the sorts of contributions made by particular users) it appears that the overall tone and direction of discussion in such a

small, local list can be significantly influenced by a few key contributors. Unlike a face-to-face meeting where one develops a sense of the discourse, of the relative standing of groups for and against a matter for example, there are no nodding heads or agitated gestures online to give similar impression. For better or worse, a single dissenting voice can have the force of collective opinion and derail what progress deliberation may have made. The analysis also suggested that, left to their own devices, contributors have divergent styles of engaging an issue in email – all which may have legitimate role in local governance. It became clear during follow up interviews that, in the context of a small community or neighbourhood, these observations are significantly mitigated by the social environment within which contributions are made and subsequently evaluated. A lot was both written and read ‘between the lines’ on the basis of continued association both online and in the offline community.

To briefly summarise the contributions of this stage of work to the developing theoretical frame, I return to the questions I put in the introduction of this section. I had set out to understand what sorts of conversations were conducted on the community list, and accordingly, what their potential contribution was to governance. The patterns I identified propose that a broad range of ‘conversations’ contribute to local governance, at different levels. I found that while instrumental discussions most clearly make a direct contribution to governance, expressive discussions play an important role in a pluralistic process by helping create normative common ground. Rarely did online discussions appear to lead to consensus in conventional terms, and I was also somewhat surprised to see decisions were not taken directly online. It would be interesting to understand why.

The incidence of codes, as well as patterns that I identify, give some idea of the character of local online ‘Deliberation’ on the list. While the ‘*Deliberative Engagement*’ pattern is perhaps nearest to what is normally envisioned as deliberation, the other patterns show the

range of local online communication that occurs in practice. The dimensions proposed by Gutmann and Thompson (2004) add significantly to the understanding of this deliberation - particularly the role of expressive dialogue where there is inherent pluralism, or where issues are unlikely to be directly resolved. It appears also that not all agree on the purpose of, or even ideal form of deliberation, making it more difficult to maintain the online deliberation as a public good.

The conversation patterns give a sense of the extent to which residents become 'Directly' involved in governance through the discussion list - from making announcements, to asking for feedback, or even directly mediating disputes. From a TCT perspective, the cost of instrumental communication is significantly reduced, and this facilitates all manner of community oriented initiatives co-ordinated directly by residents. The analytical results however also hint at the complexity inherent in the concept of 'Directness', even at hyperlocal level. In the '*Stakeholder co-ordination*' pattern residents were co-ordinated by definition, while in turn the deliberation amounted to collusion between those participating against local government as broader representative body. The '*Deliberative mediation*' pattern also highlights some of the dangers associated with direct governance, where the process of mediation might easily amount to the bullying of the minority in a dispute.

While the observations also have significant implications for 'Democratic' equality and autonomy, discussing these principles in detail here largely overlaps with the comments made of Directness and Deliberativeness. To add to what has been said, the codes attributed to the messages of the top ten contributors show a range of styles of contribution. While a participant might be most the frequent contributor to a particular topic, their communication represents only some aspects of the overall dialogue. Participants specialise in topics that concern them, and are usually limited in the type of contribution they make. This affords participants much broader (or more equally distributed)

opportunity to make an impact than might be recognised by a top down view perceiving only the power-law distribution of contributors.

Though I consulted field notes and data from follow up interviews in the interpretation of the patterns I observed, the discourse analysis had only begun to expand on the complex dynamics of local governance that were supported by an apparently simple discussion list. Reflecting back to the literature, I had used the notion of community centrally to frame local governance, yet a 'sense of community' was only somewhat visible in this round's characterisation of the online dialogue. I proposed further that, out of the pluralist dialogue afforded by asynchronous online communication, residents developed a shared understanding, or a shared sense of the pragmatics underlying an issue, and that this proved significant to governance outcomes. I also proposed in cases of '*stakeholder co-ordination*' and '*deliberative engagement*' that residents appeared to be effective at resolving issues in a direct manner, developing a degree of collective agency or autonomy. Yet, what did residents themselves make of these interpretations? How did they experience the various forms of conversation, and how partial was my own view of communicative pragmatics in making interpretations?

The next stage of analysis accordingly sets out to refine the theoretical understanding in light of residents' own understanding of the dynamics of the deliberation, eliciting something closer to a first person view of events on the list. The method of discourse analysis was also limited in that the role of technology itself was somewhat obscured by the focus on content. The analysis in the next stage of work is designed to more directly elicit participants' views of the opportunities and costs afforded by the online discussion list as technology.

5.3 Third stage: triad card sort interviews

5.3.1 Goals and initial conceptual framework

The goal of the third stage of analysis was to verify and refine the theoretical understanding of hyperlocal online deliberation, in terms of conversation patterns, by eliciting residents' own interpretation of communication, eliciting 'first-person' views of events on the list.

Reflections on the outcomes of earlier stages of analysis in light of the literature suggest that the character of hyperlocal online deliberation (and also the implied potential for direct contribution to governance) must be understood in the context of the geographic locality and the dynamics that brings with it. In particular, understanding deliberation in the context of local community implies that 'pragmatics' (Habermas, 1987) play a significant role - informing both the background to what is said, but also the underlying relations that are expressed between participants, and the opportunities for action that are afforded. The pragmatics are not understood as a static feature of the context, but as constantly reconstructed through the same interaction that they inform. In other words, one significant aspect of the role of online deliberation in local, direct governance is the manner in which online deliberation affords the dynamic construction of pragmatics, and impacts the degree to which this is shared. Similarly, the success or failure of online deliberation potentially has impact on the collective sense of agency (Bauman & Tester, 2001), or political efficacy (Anderson, 2010) of participants. Again, if governance is viewed as a co-constructive process, one might ask how online deliberation plays a role in the construction of a governance 'reality', of shared values in relation to governance, and so on.

There is also evidence that the online discussion list may reduce some transaction costs associated with direct deliberative governance, but at the same time introduce new costs.

These costs are only partly associated with the affordances of the technology - perhaps the greater extent of costs and opportunities are related to the socio-technical environment afforded as a result of the technology. In relation to this, not all participants agree on the ideal nature or role of deliberative governance - the results so far suggest that it requires work from both participants and moderators to maintain online deliberation as a form of 'public good'. This raises a number of questions: from the perspective of list moderators and the RRA committee - does the discussion list ultimately support their work, beyond reducing the cost of making announcements and co-ordinating action, or does it simply complicate what is already a demanding volunteer task? From the perspective of residents - does the list empower participants to make meaningful contribution to local governance, while perhaps making the dealings of the RRA committee more transparent? Or is the effort required to wade through a 'noisy' discussion unwarranted, a discussion potentially further co-opted unfairly by existing community leaders?

5.3.2 Method

I discussed the theoretical and epistemological background to the methods employed previously, in Chapter 3. This section accordingly reports mainly on the detail of implementation.

During this stage of analysis I conducted in depth interviews with participants in the community list. The goal was to gain a more nuanced understanding of the governance dynamics and underlying pragmatics; to understand the costs and opportunities that participants experience as afforded by the list as technology. I also conducted interviews with a small group of independent subjects (research students) who provided an external perspective on the interpretations I had made to this point; their vantage point uninformed by the deeper pragmatics that I shared as participant-observer with other residents. The overall objective is to elicit participants' understanding of messages - the broader 'personal

constructs' (Kelly, 1970) of residents, as well as the detailed pragmatics (Habermas, 1987) that inform each conversation. The outcomes of the card sort interviews are analysed in their own right, but also reflect back on the interpretations made in previous stages of work by allowing direct triangulation through shared source material.

Participants were interviewed about a selection of thirty messages from the discussion archives. The messages were theoretically sampled on the basis of key strands of enquiry emerging from previous rounds. They were chosen to be representative of the 'patterns of conversation' that had been proposed, while also giving a good cross section of authors and types of contribution characterised by the codes used in discourse analysis. For practical reasons, very short or very long messages were omitted, though there was a cross section of length and style of contribution. This meant from a theoretical perspective that any given message might at once represent a pattern of conversation, a particular style of contribution, or even communication by a role within the socio-technical network.

I interviewed four 'external' observers during a pilot run of the methodology - all postgraduate students at the Open University. These interviews were used to refine protocol, but also provided a useful outside perspective on the case dynamics, as I explain above. The substantive interviews were conducted with fifteen residents of the case community, theoretically sampled on the basis of their contribution to the lists, as well as their interest in particular topics. To be clear, I reported (Section 3.4) 17 interviews in total – there were 13 interview sessions with residents, 2 of which were however conducted with married couples. The dual participant interviews had not been designed as such, but the results are none the less considered valid given that no attempts are made to treat results statistically. Where opinions of paired participants differed, this was recorded as such in the records and interpretive results. The theoretical sampling led me to include the following: a moderator, several frequent contributors, infrequent/occasional contributors,

non-contributors, and also two people who were not subscribed to the email lists at all. Interviews typically lasted two hours, and followed procedures and guidelines established by Rugg (1997; Rugg & Petre, 2006) and Myers (2007). Particular to the card sort technique (which I report on below), this included using a prepared introductory script for consistent briefing, with a sorting example external to the domain of the exercise and a clearly defined protocol for conducting the actual sort. Appendix 1 shows examples of the interview briefing form, sample questions, an example of a card that was used during the sort, as well as an example of how the results were recorded. In three cases follow up interviews were further conducted to clarify statements that had been recorded.

I used a triadic card sort (Rugg & McGeorge, 1997) to structure the interviews, requiring participants to select three messages (one per card) from the sample at random for each round of sorting and discussion. The triad sort required that they identify a dimension that two of the messages shared, the third message representing an opposite or alternative. This is similar to the technique commonly used in developing a “repertory grid” (Rugg & Petre, 2006). Participants were further requested to vocalise their thoughts as they worked, reporting on their process of reasoning for the sort, but also on details in the messages that struck them as significant. I recorded the entire interview, but also made notes of comments to follow up on immediately following a round of sorting. Once a participant had produced their sort, the interview would continue with a mix of questions to clarify constructs, and open discussion of issues or dynamics that occurred to participants in relation to the lists. I developed a script of standard questions where this might be needed to prompt discussion, deliberately worded to be neutral. I also used ad hoc questions to probe the theoretical constructs that had emerged as significant - in particular focussing on the role of technology in governance, and possible costs and opportunities associated with the technology.

This produced two levels of data: by sorting and comparing messages participants produced ‘personal constructs’ (Kelly, 2003) reflecting their interpretation of online interactions, and which could be used as the conceptual frame for further content analysis; at the same time, the in depth discussion of the material, as well as participants’ rationale for sorting decisions, produced rich interpretive data. By sampling messages or cards on the basis of the “conversation patterns”, I was able to triangulate my own interpretation directly with residents’ own understanding of the dynamics underlying particular messages.

5.3.3 Triangulating card sort data with ‘patterns of conversation’

Before I present detailed outcomes of the constructs generated by the card sort, this section reports on triangulating earlier work with the detailed comments and insights recorded during the process. To briefly recap - the messages used in the card sort had been sampled to represent the “patterns of conversation” proposed in Section 5.2.3. The responses during card sort interviews were then associated with relevant messages by recording the message ID. This made it possible to triangulate earlier work on message patterns with the comments participants made about the same message sources.

While I present messages below as they were sampled to represent particular patterns of conversation, the distinction is not always absolute. In many cases there is conceptual overlap - a message might be considered representative of both co-ordination and deliberative engagement patterns on its own. Further, within each of the patterns of conversation, the message sampling attempts to cover a spread of more detailed theoretical constructs: whether a message is “instrumental” or “expressive”; whether it relates to matters “external” to the community or discusses the deliberation itself at “meta” level; and simply to ensure that more than one topic of conversation is presented.

I have noted that the sorting exercise was intended to function at two levels - message cards were being used as much to support the initial definition of constructs, as to be elicitation devices for subsequent open ended discussion. As a result the material gathered during the card sort ranged well beyond the contents of a particular message, taking in its broader conversational context, as well as the underlying community dynamics. It is unavoidable that this discussion would be framed by the triad of messages that had been drawn and contrasted during the first steps of a sort - participants would focus on particular aspects of the message exchange as a result. Since the objective was however not to make a quantitative comparison, this was considered an advantage. Subsequent participants would discuss new aspects of the same exchange, eliciting more than simply a tally of agreement or disagreement.

Because the objective of this section is to triangulate earlier analysis, I limit the comparison to where the fresh evidence supports, contradicts or expands on my own earlier interpretation, while trying not to be repetitious. I introduce each pattern with a brief account of the messages sampled, and then summarise participant observations as they reflect on my earlier discussion of patterns.

5.3.3.1 Announcement

Six messages represented the *announcement* pattern: three related to governance, while three were chosen to test how participants evaluated other content in relation to governance. The governance announcements concerned a regional neighbourhood watch meeting; information about changes to property valuations by the city council; and an invitation to a local 'earth hour' environmental gathering. The other messages included a lost pet reported found; a piano for sale; and a local music event.

As I had anticipated, the discussion of these cards often concerned whether messages that did not directly relate to governance belonged on the list. An interview participant for example commented on the 'for sale' notice: *"I think it is a good thing... Can be spam, but the local context makes it relevant."* They compared it to a physical community notice board, where more than just what was for sale, the notices were a form of gossip, providing social intelligence. *"[A] formal way to 'contact the council' does not offer this opportunity ... it is amazing what you learn."* Others did not see the social aspect and considered advertisements noise on the list: *"ads belong on Gumtree, they're selling something for personal gain."* I did note, referring back to the message archive, that some of those expressing opposition to this sort of advertising on the list had in the past placed ads of their own. Participants similarly expressed mixed feelings on messages concerning the lost pet and music event - some feeling these messages brought the community closer, offering a 'lighter' form of interaction than governance deliberation - others seeing them as merely noise.

The governance related announcements drew relatively little comment - in two cases labelled "boring" and quickly scanned because of their press release like style. Two interview participants however picked up on more subtle aspects - that contributors were attempting to enlist others in an activity, and were using the list as much to advertise as to apply normative pressure for residents to attend. They commented particularly on the start of one message, which read: *"As a conservation village, it would be great if we could encourage everyone in [the town] to sign up for Earth Hour."* Contributors were further using the legitimacy and public-ness of the discussion list to assist their cause: *"The lady appears to have influence over [residents in her own street] but she is addressing her email to the [ratepayers association] who have, in her opinion, influence over the larger list."* While the interview participants did not feel this was wrong, they recognised that there was a coercive aspect to some of the communication.

This supports my own evaluation that while superficially announcements appeared purely instrumental, they nonetheless afforded the contributor an opportunity to frame an issue or action and implicitly present an opinion or value statement in the process. Participants had commented on exactly the same message content I had earlier evaluated as normative. The comments however also point out more subtle issues of “officialdom” - the ratepayers association bolstering their status as “public officials” by posting formal announcements and government press releases. Interview participants in turn appeared to recognise the officialdom in the way the ratepayers association were addressed (and indirectly enlisted) online.

5.3.3.2 Feedback exchange

Three messages were chosen to represent the *feedback exchange* pattern. One related to a planned helicopter film shoot - asking residents to report disturbance; a second asked for feedback on a newly appointed waste collection service provider; a third was from a resident asking for feedback on the proposal to use paintball guns as a baboon deterrent.

Interview participants commented on both waste and film messages as an example of the list being successfully used as a collaborative tool: *“The waste issue was resolved effectively partly because of the forum - because it was possible to gather feedback...because of better communication.”* This supported my own evaluation of feedback exchanges as a useful and potentially necessary instrumental mechanism.

Another participant, however, commented on the language used in the message - the contributor had framed the waste collection as a *“total fiasco”* before asking for further opinions. What was interesting, however, was that this language was not interpreted entirely at face value. The interviewee laughed at the phrasing, and commented that *“[p]eople’s character comes out in these things....strongly so...[name] is very short and to*

the point.” In other words, the words “*total fiasco*” were interpreted through first hand (offline) acquaintance with the contributor and their style of communication.

I earlier made the distinction that, though *feedback exchanges* implied some form of reciprocation, these conversations invited feedback through private or offline channels and so did not develop into dialogue on the list. To the extent that the message relating to baboons specifically requested responses to a private email address, I also used it as an example of the pattern. However, three interview participants immediately recognised the specific message as the trigger for a heated online debate: “[*name*] did not realise he is opening a hornets nest in that.” Interestingly, while interview participants external to the community were suspicious of the request for private feedback on what they interpreted as a controversial topic, community members understood it as a (legitimate) attempt to avoid exactly the online furore that the message sparked. Again some interview participants interpreted the message in terms of the person posting it. They commented on the person’s usual “*level*” communicative style, and understood that, following a baboon raid to his house, accusing baboons of ‘*wrecking the kitchen*’, ‘*smashing the glass*’, ‘*having another party*’ were the result of needing to express feelings after an unpleasant experience.

“There’s an element of him losing his blob a little...more impassioned than normal...”

Most requests for feedback were however more clearly instrumental - made by the residents association in relation to ‘official business’, and rarely eliciting debate. Interview participants supported my evaluation that these exchanges allowed residents an opportunity to contribute instrumentally to local governance by providing information or evaluation, and that they felt more engaged with governance issues as a result. Not all agreed however that this held those in charge of governance genuinely accountable - residents did not initiate the feedback, and results were generally not shared. I followed up on this point with the chair of the residents association. They maintained that requests for feedback were

made informally, when they needed either information, or wanted a 'litmus test' of community opinion on an issue. Answers were not formally compiled, and feedback on the list avoided simply because responses were often repetitive, and would increase communicative overhead on the list. I did note that this had the further implication that no formal 'decision' would be implied by responses - it was entirely at the discretion of the requester to interpret and act upon feedback.

5.3.3.3 Stakeholder co-ordination

Six messages were chosen to represent this pattern: five related to the wetland property development conversation I made reference to before, while the sixth was a request for community input to a municipal legislative process - what I had referred to as an "external" governance issue. Messages that were sampled to represent the wetland conversation included discussion of the issue, invitation to a meeting, an offer to pay community legal fees, instructions for submitting objections to the development and finally, a resident later congratulating the like minded on the level of response and initiative shown.

The "external" message was not involved in any card sorts, and so had no further comment on it. This is a potential disadvantage of the triad sort protocol I implemented where participants selected messages at random from the sample. In this case, I do not consider this a major limitation however - the particular message was included mainly to provide diversity, and the protocol provided good coverage overall.

Opinions on the wetland stakeholder process were mixed: Some commented that, overall, they considered it constructive: *"The core of being a community is here... Issues are being solved internally ... these attempts to get people together - to meet in the hall, or to provide signatures."* Others disagreed, pointing to the process as biased and potentially unfair to the property owner. An interview participant commented that, partly as a result of online

collusion, residents behaved badly at a subsequent face-to-face meeting: “[A] *bunch of hooligans, shouting things and not even thinking before they say it ...it was just so un....controlled that I thought it was a waste of time and only made things worse.*” They felt the internal stakeholder process was being abused to polarise residents, or to shape their opinion. One of my interview participants was directly involved as co-ordinator. To them, the ‘threat’ posed by the property development - to the community as a whole - was beyond question. They commented on their use of the list to co-ordinate a response to this perceived threat, including for example giving out information hand-outs online: “[Town name] *as community likes to criticise, but if someone does not force feed them - or give them information in palatable, bite size chunks, then they will sit back and hope someone else will do the work ... Because this was so important for certain people, they took the trouble to make ‘kos pakkies’ [food/information parcels] for everyone.*” The information hand-outs went as far as presenting a list of potential objections a resident might pick from in their response to council.

As the date for submission of objections approached, residents were encouraged to respond to the list with the date, time and content of their objection to council. This was justified by the argument that the city council had, on two previous occasions, acknowledged less than half the objections that were known to have been submitted. The co-ordinators claimed to be using the list as a form of record to hold council to account. Interview participants comment they are aware that this made it easier to see who had contributed and who not - “*it no doubt had a ‘social pressure’ function.*” However, this was mitigated in one contributor’s opinion: “*if this was not further resolved, it was not through infighting, but because the powers that be are more powerful than the community ... not through any failing of us as a community to actually co-operate with one another.*” The stakeholder process had in other words been successfully framed to the majority of residents as a co-

ordinated effort to combat the ‘abuse of process’ by the developer, and the suspected maladministration of their application by council.

I commented on the stakeholder co-ordination pattern as potentially positive - the list being used to co-ordinate action, to provide a stronger voice to the community in response to an external threat. This was particularly relevant where there was an imbalance of power - for example regional government, or a well resourced consortium acting against the interests of the community. The comments exposed that this potentially had a negative side where the imbalance of power worked in the opposite direction - in this instance effectively positioning the community against an individual property owner as a result. The ratepayers association were clearly aligned with one side of the argument, and so made no attempt, as list moderators, to represent both sides. In their opinion, the owner of the property was not a local resident and had previously attempted to abuse process to serve his own financial interests - he should have no access to the official community “channel”.

5.3.3.4 Deliberative mediation

Five messages were selected to cover the deliberative mediation pattern: four relating to a resident’s aggressive dogs, and one to the ‘vandalism’ of external lights on a property. Messages selected from the ‘dog’ thread followed the progression of the debate - the incident is reported, another message adds weight to the accusation, official sanction is threatened, and the owner responds.

Responses made on the ‘lights’ issue did not add significant new insight. An interview participant comments that, though “*in the village, we dont like external lights*”, in this instance there was insufficient agreement about the specific issue, nor the motivation for it to be taken further. The original poster used the term ‘vandalism’ in an attempt to frame the act in a particular manner. Vandalism in general was however not a significant issue in

the community, and in this case, all were not agreed that the act had as much constituted 'vandalism' as a valid response to un-neighbourly behaviour. While the topic may have expanded to investigate the values underlying various perspectives on the act, this does highlight the self-selected nature of deliberation on the list - issues are 'on the table' to the extent that residents are motivated to pursue them.

The comments received on the 'dog' thread supported, but also expanded my interpretation of the interaction. A participant - unprompted - supported the distinction I made between deliberative mediation and deliberative engagement: *"This can be resolved, I cannot see this being on the list for too long compared to baboons."* As I had understood, the first message in the conversation thread was initially interpreted as an *"individual complaint...moaning"*, however, with support soon following, the issue was legitimised. *"Something happens and you think you are unique"* another commented - but the problem became easier to address once people realised what issues they had in common, even if just to identify the source of a problem. Participants agreed that a subsequent message indirectly *"raised the stakes"* by inviting residents to respond to authorities, supplying relevant contact details. It was submitted by the head of the neighbourhood watch, someone in almost official capacity in other words, and was interpreted as a *"veiled threat...non-response is no longer an option."* Another interviewee commented on the response by the dog owners - who in her opinion had no intention to control their dogs. *"At least they got rid of the vicious dog"*, she commented, though the owners were not really affected: *"they are just not that sort of people."*

Further comments related to the difference between mediation within a community and the alternatives. An interview participant external to the community noticed how contributors 'legitimised' their complaint by establishing local credentials: *"People are very specific in terms of the area they live in. They say both names of the couple, the house number...how*

many years they have been living there.” This was interpreted as an attempt to project sincerity, to evoke trust from the group - though the personal details may have little to do with the facts being presented. Interview participants also commented on the use of emotional language to make a case - the use of phrases such as “*a child will be savaged*” and “*[street] has become a No Go area.*” Some saw this as fear mongering, a common theme on the list: to invoke the imagery of what *may* happen to families or children in particular. Others appreciated the language as a function of the immediacy of the medium - that messages were written “*close in time to the actual experience....a good way of letting anger out...to let everyone know. It is nonsense that people object. She is scared, living alone, she should express herself.*”

Because of the expressiveness and volume of negative responses however, the dog owners unsubscribed from the list. They none the less endured the effects offline, where the discussion continued for weeks. On other hand, the extent of support for the complainant - others reported also being attacked - suggests the animal owners had been irresponsible and not responsive to earlier complaints. Participants felt that the owners received gentler treatment at the hands of the community than they may have experienced from official sources - their animals likely impounded, themselves fined or subject to litigation. An interview participant similarly commented on the wetland thread that “*once lawyers and money become involved....something is broken - the community lost their focus there.*” In both cases the subject of community complaint may however have disagreed: the wetland property owner soon chose not to engage ‘the community,’ instead following what he perceived to be more objective legal process through the city council, and then court. The dog owners disengaged as far as possible.

While no doubt effective when there was sufficient consensus, deliberative engagement may have been an imperfect form of conflict resolution. Those most in favour - judged by

evidence from the interviews - appeared to also invoke the notion of ‘community’ relatively uncritically, unobservant of potential conflicts of interest and the extent to which the notion of ‘the community’ was open to abuse.

5.3.3.5 Deliberative engagement

Nine messages were selected to represent this relatively complex pattern of conversation. Though I chose messages from more than one thread of conversation, most were selected to represent the long-term ‘baboon’ deliberation. Messages were selected to include instances where both problem and solution were discussed, some expressive (one was considered a ‘flame’) while others were more neutral and apparently instrumental. One message attempted to organise direct community action, while another made an attempt to co-ordinate by summarising points of discussion.

In the previous phase of work I remarked on a conundrum: the online communication afforded the community the opportunity to deliberate complex issues over several months at relatively low ‘cost’ to those engaged. However, the deliberation seemed to become and end in itself - driven by controversy and reactive contributions rather than showing any sort of deliberative progress. Responses during the interviews confirmed that most participants were frustrated with the lack of resolution: “*just armchair philosophy*” one suggested. Another commented that the ease with which people were able to contribute was little use when “*very little comes out of it...its just ideas thrown around by people.*”

Messages with strongly expressive content drew most negative reactions - in particular where the author was judged to be “*flaming*”, for example by using combative language or attacking others. An interview participant commented on one such message as simply selfish - “*all about herself*” rather than useful to the community. Another called the same message “*the textbook vent.*” The danger of emotional arguments, he proposed, was that

they did not allow a counter argument, or often distorted facts. Interview participants who knew the message contributor saw a different side to the communication however:

“[Name] wrote quite a few emails during this time...and people had quite a rabid response, saying she was very rude...but knowing [her], and reading her emails is an absolute pleasure...her writing style is a real reflection of her personality and her nature.” This is peculiar to local deliberation: while some list members knew the author personally, and made accommodation for her style of writing, others knew her only through the list and interpreted the message at face value. The author wrote familiarly, addressing a community imagined to be her close neighbours, spurred on when friends then offered support. Others were however engaged in the same conversation at an entirely different level, and took offence - misinterpreting the responses of support. This was a potential source of conflict, which on more than one occasion derailed deliberation. As a result, some interview respondents felt that the official community list should be mostly instrumental, with short, factual messages rather than emotive discussions of personal opinion. One participant commented that perhaps the emotive discussion belonged on a blog rather than an email list where messages were sent to all residents. Many felt the lack of resolution stemmed, at least partly, from the nature of emotional or value driven debate. This appeared to contradict my earlier evaluation: that expressive interaction allowed participants (particularly in a local community) to establish the range of values held by residents, if not so much to reach agreement. I proposed that this helped build sufficient common ground to enable collective action - even where full consensus may have been impossible.

However, it may be that my interpretations remain valid - in spite of the opinions expressed by interview participants. Early in the research process, a participant commented that: *“the biggest failure in the baboon debate ... is that there is a lack of consensus on the basic issue.”* While there were clearly differences of opinion, as I continued interviews there appeared to be emerging ‘sides’ to the deliberation - the “baboon huggers”, the

authorities, others demanding the baboons be removed. In other words, rather than ideal consensus, there emerged a number of loosely defined positions in the debate - none the less a step forward from earlier turmoil. Many proponents of each 'position' subsequently found they had similar objectives, if different opinions on exactly 'how' and 'why'. The dialogue could be shifted from fundamental disagreement, for example over the respective 'rights' of humans and baboons, to the shared goal of moving baboons out of the village - for the sake of both humans and baboons. I would argue that this was only possible because of the expressive deliberation that had already occurred.

Some months later a group of volunteers were given the go ahead to herd the troop of baboons away from the village, back into an adjoining nature area. I included a message relating to this event in the card sort, and it drew unanimous positive comment during interviews. A participant who was very critical of expressive communication on the list comments: *"This time we were doing something active, that should be on the ratepayers list...Exactly the kind of thing that should not get lost."* Many others agreed - this was the sort of thing they were eager to read about. More than just a successful ad hoc experiment however, it was significant that there were no negative responses before or after the event. Very few recognised that this was perhaps the most significant achievement. A list moderator commented that they deliberately framed the call for volunteers to accommodate values strongly expressed on the list. The activity itself was also designed to be respectful of both sides of the debate - the "chasers" were allowed no weapons other than water pistols and maintained sufficient distance to not directly threaten the animals. The approach proved very effective all the same.

Though many residents disliked expressive conversation on the list, it appeared to play an important role in governance outcomes. Interview participants made it clear that emotive language and apparently circular normative deliberation was uncomfortable to have to

digest. Rather than making it easier for the residents to be part of governance, the expressive nature of '*deliberative engagement*' conversations may in fact have been making it significantly more work.

5.3.4 Detailed outcomes of the card sort - the personal constructs of participants

The interview process generated a set of 75 constructs, too many to discuss in detail in this thesis. The construct labels presented below are not meant to be interpreted freely by the reader. The meanings assigned in my discussion below are based upon reference to both the component (opposing poles) of each construct identified during the interview, as well as more detailed notes on the interview participant expanding on their process of thought. For example, in stating that a message is either 'personal', or written in an 'official' capacity, what is of interest to this interpretive study is the meaning the participant attaches to 'personal' or 'official' communication, the role of the lists in either supporting or obstructing either form, and how participants experience this impacting the governance of their world. Furthermore, while all of the constructs may be meaningful in their own right, all do not necessarily make equally useful contribution to this investigation. As it is common with in depth interviews – there is more data available than this one study can take in. The discussion accordingly focuses where participant constructs add new insight to, contradict or amplify findings during earlier stages of work. The discussion below represents the outcome of several rounds of reflection on the constructs, cross-referenced to detailed interview notes and discussion archive, and further considered in light of the conceptual framework of the study. Though I do not discuss each of the constructs in detail, I nonetheless include a table with both constructs and their component polar opposites at the beginning of each section.

I reported that both external observers and residents participated in card sort interviews. I initially intended to exclude the contributions of external participants, simply using these interviews to refine protocol. I chose not to entirely omit reporting on these contributions however, because they were important to my growing understanding of the case. External participants provided fresh perspective, and the issues they highlighted broadened my own understanding, sensitising me to potential dynamics within the discussion list. I do not make direct comparison between the constructs produced by community members and those of external participants. It presents a potentially interesting dimension of analysis, but would require broader polling of external participants and thorough treatment to genuinely add value. This could be a worthwhile piece of future analysis on the basis of the data I already have, supplemented with additional external interviews.

While I acknowledge the contribution of external participants, where I report the results I focus mainly on the understanding or interpretation that residents make – they constitute the case study after all. The 75 constructs were grouped into four broad themes for further analysis, which I present below. Within these themes I present a number of ‘key issues’ – each informed by one or more of the constructs identified by participants in the card sort, relating these back to the governance interactions of the community. The themes were chosen, and are arranged here to reflect the developing theoretical frame, and my own process of sense making and understanding, each theme developing on the basis of concepts presented in the previous themes.

5.3.4.1 Theme 1: The (local) online public sphere

This theme reflects on the affordances (Norman, 1999) of (geographically local) online interaction, compared to what may have been afforded otherwise. This presents the most

literal interpretation of the ‘matrix of opportunities and costs’ (Bimber, 2003) that I proposed to investigate of the new sociotechnical environment.

Table 3 - Card sort constructs relevant to theme 1

Participant construct	Conceptual poles of construct
<i>Internal participants</i>	
thread	part of a thread / one off
topic	baboons / wetland
animals	animals lost and found / problem animals
audience	directed at everyone / directed at particular people
ads vs. issues	community issues / advertising
importance	just an ad / important
function	community orientated / advertising
conciseness	short / long, poorly structured
length	heavy, long / light, sound bite
investment required	long / brief
<i>External participants</i>	
function	stand on its own / amplifies another message
style of argument	rambling polemic / concise argument
community involvement	just an ad / addressing community issues
content	wetland / security
function	stand on its own / amplifies another message

Key issues include:

Participants reported a paradox: it was less intimidating to write a message on the lists than to confront a neighbour but, at the same time, almost everyone interviewed said they post less often than they would otherwise for fear of the response their message might evoke. A common response is – “because I don’t want to go there”. This was particularly true of anything discursive or potentially contentious. In a local forum such as this, participating is neither impersonal, nor anonymous. A comparison with contemporary field notes taken at the local ratepayers annual general meeting suggests the opposite in an ‘offline’ meeting – it was intimidating to speak up in front of a room full of people, but the stricter meeting protocol includes certain ‘protections’, if only a better sense of where opinions lie before speaking.

Asynchronous conversation has its advantages and disadvantages. People were not excluded from conversation simply because they could not be in a particular place at a certain time. On the other hand, the broken timeline could be very disruptive, with participants interjecting once a discussion had potentially moved on, and a number of conversations effectively mixed up in one channel. Where a face-to-face group discussion afforded participants some sense of its progression, an indication of where opinions lay (e.g. by seeing nodding heads or agitated gestures), on the community lists a single dissenting voice could (for better or worse) derail a line of thinking because of the absence of these clues.

Some of the residents I interviewed felt the online channel could be divisive – creating ‘sides’, or even victims and perpetrators, where previously there had simply been a range of opinions. Related to this, participants expressed the concern that the ‘open channel’ reduced the possibility of a negotiated solution between directly affected parties, face-to-face. Instead, positions were established publicly, broad judgements made, and as a result legal steps threatened (or taken) – damaging what many had perceived as a ‘laissez faire’ approach that the village is historically known for.

Experience of formal meetings and informal face-to-face conversations suggested that the online conversation often enough flowed smoothly into offline interactions and back again. It was really not a separate ‘space’ as much as an extension of daily interaction. At the ratepayers AGM, issues that had emerged and been argued online were taken up and discussed exactly as any other. In turn, discussion at the AGM was smoothly continued online after the meeting. This was potentially a negative aspect for those who are not part of the online governance conversation – though

many of the online stalwarts were conversely not seen at the AGM. Their reasons varied from feeling co-opted by the meeting, to simply not being able to attend because of parental duties.

5.3.4.2 Theme 2: Imagined community

The theme of ‘imagined community’ (Anderson, 1991) is grounded in the notion that a sense of community, and the placement of oneself within that, is necessarily subjective and projected (Fayard & DeSanctis, 2009). The lists, in turn, significantly impacted the sources an individual drew upon when constructing their sense of local community. This is particularly relevant if one approaches governance as a form of collective action - a co-constructive process of ‘creating’ meaning and therefore the potential for specific actions (Castells, 2007; Willcocks, 2004), rather than a simple poll between pre-arranged options.

Table 4 - Card sort constructs relevant to theme 2

Participant construct	Conceptual poles of construct
<i>Internal participants</i>	
language	criminalising / neutral
content	self advertisement / genuine information
integrity	face saving, dishonest / genuine
emotional content	apologetic, defensive / controlled, in charge
self-expression	emotive, personal / intellectual
voice	official business / personal complaint
formality	personal / information
goal orientated	personal, jokey / community resolving issues
role	personal account / official report
community engagement	personal, local / impersonal notice
factual vs social	factual, detailed / hat doffing, reconciliatory
communicative orientation	formal / spontaneous
<i>External participants</i>	
tone	factual / emotional
style of engagement	consensual / angry
reportage	sharing a story / factual report
language used	formal / informal
tone	strong opinions / gentler, potential amelioration
communication style	over the fence / clean shirt

Key issues include:

Participants were exposed to a potentially broader (less self selected) range of opinions and values on the list. Often residents interacted with community members online that they had never met, or otherwise did not recognise from other contexts. In interviews, participants did however express unease over the projection of an 'online personality', and in relation to this the potential that interaction online was one sided and participants quickly typecast.

Participants identified how some residents shaped roles for themselves online in relation to their imagining of the community and their place in it. In some cases these roles extended their offline lives fairly directly, but not in all cases. Either way, some participants put a great deal of effort into 'presenting themselves', what Habermas (Klein & Huynh, 2004) described as "dramaturgical action." It may be that the expectation of continued contact, and the likelihood of encountering other participants offline, partly motivated this.

The online conversation created a shared frame of reference. During the card sort, participants would often immediately recognise a topic of conversation, identified consistently across interview subjects by some key phrase that had significance in the discussion. Often this would be the subject line of the email initiating a conversation. "Ah, the 'dogs out of control' story," someone would exclaim. This may otherwise not have been shared to the same extent. What these topics meant, or how they were interpreted, was however less shared than participants assumed. The divergent interpretations and perceptions of the value of different sorts of content (and styles of interaction) was a prominent feature during interviews. Participants also had divergent views on what 'belonged' on the lists.

Might the lists have placed the ratepayers association, or particular role-players such as the list moderator, more prominently in the residents' imagined community?

5.3.4.3 Theme 3: Collective action

The previous section discusses aspects of each resident's imagined community, a potential driver and also modifier for collective action. This next section develops on this by focusing on some of the aspects of the collective action that were raised during interviews.

Table 5 - Card sort constructs relevant to theme 3

Participant construct	Conceptual poles of construct
<i>Internal participants</i>	
constructiveness	fighting, angry / positive
action	vent, fear mongering / action oriented
stage of process	thank you / suggestion
time	once off / on-going issues
community orientation	personal / community issues
persuasion vs. collaborative work	getting buy in / crowd source information
<i>External participants</i>	
community action	resolving negative problems / doing something positive
community resources	build / leverage
function	problem information / spreading the word
community orientation	opportunities / problems
process	solution / opportunity
focus	problem / solution
action orientation	request for action / just another idea to consider
problem stage	early, open / later, more organized
transience or relevance	long term response / immediate
immediacy of solution	can do now / long term
problem solving style	collective / individual

Key issues include:

During the second stage of the study I noted the organic, frequently ad hoc nature of local civic action, based on tacit agreement rather than formal decision-making process. I reported evidence that the online interaction particularly facilitated the development of the shared frame of reference that made relatively informal governance possible - by supporting on-going pluralist discussion, and particularly admitting expressive contributions which participants may have been too inhibited to make at a meeting. However, many of the interview participants communicated their disappointment with the online deliberation to varying degrees. For some, the discussions had become “more of the same”, “rants” or “fear mongering.” They felt that the deliberation derailed all too often, lead nowhere, and may have detracted from people’s willingness to eventually engage in practical action.

Many none the less agreed that the lists had been successful at mobilising the community and co-ordinating action *where there is a clear course of action*: to arrange community orientated events, co-ordinate the business of the local volunteer fire service, even to encourage local response to government requests for stakeholder input to regulations or policy. There were many who felt this was the list’s strongest contribution.

The co-ordination of action was however not always as clear-cut or politically neutral as some would have suggested. In many cases, what was presented as straightforward co-ordination did serve an additional agenda: the encouragement for residents to provide feedback would be accompanied by a ‘briefing’ that presented a very one sided view, and then went as far as providing ‘template’ objections, a range of arguments (from a particular point of view) for respondents to draw on. Though residents were presumed free to present alternative points of view on the lists, there was significant social pressure once consensus was so strongly implied. While this

could be considered undemocratic on one hand, it did potentially serve to restore the balance of power where the ‘opponent’ – e.g. an external developer, or a government agency – was significantly better resourced than any single community member. In cases where the list served the interests of a group of participants over an individual however, a similar process may have amounted to ‘bullying’.

5.3.4.4 Theme 4: The work of governance

One participant commented on the way that decisions were “usually” made at local level: a meeting was called, and those attending were assumed a quorum by virtue of their presence, the only ones with sufficient interest to share in the decision-making process. While the online discussion altered this dynamic somewhat by allowing more open-ended participation, there were nonetheless new forms of potential exclusion as a result. Such issues of power and representation reflect an underlying tension between the ‘work of governance’, and the power associated with being in charge of local events. As another participant implied, there were many ‘on the side-lines’ who were quick to accuse the ‘doers’ of the abuse of power, though they themselves were unwilling to become involved beyond making comment.

Table 6 - Card sort constructs relevant to theme 4

Participant construct	Conceptual poles of construct
<i>Internal participants</i>	
who is addressed	within community / addressing the RRA
being official	personal / moderator
source of control	internal arbitration / external arbitration
forms of notice	external organisation / internal, RRA
process orientation	about the issue / about the list
meta discussion	normal messages / announcement about list
<i>External participants</i>	
democratic	addressing the group / addressing the leader
governance	leadership / supporters
problem role	victim / perpetrator
audience	community, residents / outsider, tourist

property	inside, effect on / external to property
problem location	external / internal
problem location	external threats/ internal threats
source	from within community/ external
place of effect	community issues / mechanics of the list

Key issues include:

The residents association set up the list as a tool to lower the cost of communication with residents, and, the moderator claimed, to make their actions more transparent, given that residents did not attend monthly meetings of the committee. Yet the input on the list remained informal, with what appeared to be deliberate attempts to steer away from affording the list any more official status as deliberative tool. The chair of the residents association claimed discussion on the list significantly influenced their decisions – yet one might argue that the list was potentially a strategy of containment (Isin & Wood, 1999), a way to give the community the impression of being informed and consulted – yet selectively so.

The residents association sometimes deliberately conducted matters ‘on the quiet’ on the pretext that a storm of empty, habitual protest would quickly render any sort of action impossible. They argued that they were, after all, a democratically constituted body with clear duties that could not allow constant interference with their efforts. Was there ‘too much’ democracy as a result of the online deliberation, allowing unconstructive ‘armchair dissent’ to obstruct the work of governance? There was clearly a balance to be struck – the committee members were volunteers with little to gain by their local involvement, nor their role as go-between with government on matters of local service delivery.

Some residents chose not to be subscribed to the lists at all, the ‘cost’ of being subjected to periodic conflict, or regular messages they had no immediate personal interest in, was too high. Those that were subscribed mentioned ‘noise’ on the list (though definitions thereof diverge greatly) as one of their key complaints, and discussed various mechanisms which might be used to filter the stream of messages to a ‘daily me’. Yet, the value of the list as community building and governance tool lay exactly in its reach and unfiltered nature, the fact that it was a genuinely shared channel. The list was a ‘public good’, but one which required the work of its participants to maintain.

Where there was success, the list had been effective at sharing this and so developing both individual and collective political efficacy (Anderson, 2010). From the interviews, there was strong evidence that both the opportunity to provide input online, and the outcomes of some of the more visible community processes, had strengthened people’s belief that ‘something can be done’ and that their input had been effectual. This was however not necessarily the outcome of online interaction – it clearly depended on how the list was used, and subsequently how both success and failure was communicated.

5.3.5 Reflection on stage three

The research has ‘grounded’ many insights that the discourse of online deliberation already has in respect of the opportunities and challenges of web enabled communication, for example, as recently summarised by Davies (2009). The conclusions do however warrant shifts in emphasis, and invite fresh evaluation of the potential impacts in the hyperlocal context.

To summarise each of the themes I identified in turn:

There are clearly advantages to communicating online, while at the same time the impersonal, asynchronous and above all uninhibited online interaction may at worst bully, divide and newly exclude (Price, 2009; Sunstein, 1999). The potential for online interaction to be divisive, or otherwise destructive was the most broadly voiced concern of study participants, particularly salient in a context that implies continued face-to-face association, and where online dissent spills over very directly and unavoidably into daily life.

To the extent that governance is a co-constructive process, the (local) online space provides access to a broader range of opinions (Lev-on & Manin, 2009), but also potentially affords relatively one-sided interaction within which this understanding must be constructed. While residents, as a result, likely had a broader view of the community than they may have otherwise had, active participants in the lists were ‘typecast’ in a way that framed, sometimes for the worst, their potential contribution to future processes offline.

Online tools removed some of the ‘costs’ associated with collective action, but introduced new costs, which must be negotiated, if the space is to provide a long term ‘public good’. For residents who did not previously participate in governance, joining the list simply resulted in an unanticipated rise in the cost that association had for them. Nonetheless, given the potential direct impact of the deliberation on their lives, relatively few chose to unsubscribe or avoid the list. Accordingly, almost all respondents had suggestions how this cost might be reduced by stronger moderation and filtering – particularly of more contentious issues.

Much as the tools might be used to make governance transparent, they can be used as a strategy of containment, a diversion. To complicate the matter, there appear to be ‘armchair critics’ within the community who would use this argument unreasonably to subvert those willing to become involved in the thankless work of local governance. The RRA found themselves engaged on issues that were previously considered matter of course – greatly increasing their workload rather than reducing it, and potentially driving contentious issues ‘under the radar’ for fear of rendering their (volunteer) task impossible.

Previously, I have made a brief summary of each stage of work directly following its related analysis; this was intended to reflect the cycles of the structured case framework and, in particular, to present the questions leading to the next round of work. Given that this is the final stage of analysis, this discussion now takes in all three stages of work, and moves from analysis back to theoretical constructs. Accordingly, I discuss the outcomes of this work further and in more detail in the following chapter, the discussion section of the thesis.

6 Discussion

6.1 Outcomes of analysis

The first phase of analysis provided evidence that the selected technology afforded the community a viable channel of communication to support local governance. More than half of households were represented by at least one subscriber on the lists, and a relatively large proportion of these subscribers interacted on a broad range of hyperlocal issues. The list had been sustained over several years, maintaining what appears to be a steady stream of resident-to-resident communication. That the level of individuals' participation followed a power law distribution is not unusual - this is commonly observed both online and in offline social contexts as I had observed in the literature review. The relative level of participation on this list was more uniform than observed in other but comparable contexts (Hindman, 2008; Van Der Merwe & Meehan, 2009). However, these initial observations have little to say about the nature or extent of impact that online interaction has on local governance. Were certain forms of interaction or process privileged over others? In what ways were the transaction costs associated with governance either reduced or increased for particular role players? And how might the outcomes of this be evaluated in terms of direct deliberative democracy?

In this chapter I examine these questions in more detail. However, I first step back to consider the nature of the evidence at hand - to acknowledge biases and limitations of the analysis as they relate to the discussion. I then discuss the outcomes of the analysis from the socio-technical perspective framed in Chapter 2, with specific reference to changes I observed in the transaction costs associated with governance. This gives a clearer perspective of the impact of online tools in the case context. I go on to discuss these observations in the light of democratic theory - how might one evaluate my findings

against the normative ideals of democracy, and what impact does the introduction of the discussion list have on the challenges of direct deliberative democracy outlined earlier?

6.2 Evidence evaluated

In this section, I review the strengths, but also acknowledge limitations and sources of bias that may be introduced into the evidence as a result of my research approach, and also my position as participant-observer. Instead of presenting this review after the conclusions of the discussion, as is perhaps more traditional, I consider evaluation of the strengths and limitations of evidence an integral part of the construction of an interpretivist case, and one that should, therefore, be clear to the reader prior to engaging with a discussion of the conclusions.

As a result of the choice to use a single case study, I was able to make an in-depth study, over three years, which took in the majority of public meetings, community events and every message in the online discussion archive. The research context allowed me close interaction with a significant proportion of residents, which afforded relatively detailed investigation of the pragmatics underlying this particular online deliberation - a factor which subsequent analysis proposed is very significant to the role of online media in local governance. The evidence however also suggests that the dynamics of interaction were significantly influenced by a small number of key actors in the community, and so the results may not even generalise fully within the same community five years after the research was done. The study presents a necessarily partial view of a time slice in one community. This is not to say findings are not academically useful, nor more broadly applicable. What can be generalised is as much dependant on research context as the new context it is applied to. In other words, in any given application context it remains for the interpreter to decide what does and what does not generalise - a process of 'naturalistic generalisation' which Stake (1995) proposes is the source of experiential understanding.

That the case is closely contained and well-bounded proved to be both an advantage and a disadvantage. There were very few external role players or influences explicitly acknowledged in the governance process, and none interacted directly on the discussion list. Perhaps unusually formal government was not present, and though at times implied or their role discussed, they were never directly engaged online. This is as much a finding as a limitation of the evidence. Having more significant interaction with entities external to the community may well influence how interaction occurs online - if only for introducing a more significant sense of “insiders” and “outsiders”. This is not considered a significant limitation for the study since the focus is on direct, in other words citizen-to-citizen governance. It is none the less important to consider during further discussion.

To add to the evaluation of specific data gathering and analytical methods in Chapter 3: I am aware that, in interviews, I engaged participants in a ‘with hindsight’ review of events. While it is well documented that participants’ memory can be unreliable, the card sort technique, as an elicitation device, offered some mitigation of this. Rather than having to prompt participants to reconstruct events by asking potentially leading questions, I found research subjects commented on thoughts that were evoked directly by the domain objects - in this case discussion messages that they are looking at. In many cases this initiated discussion of governance dynamics within the community list in the present. This has the advantage that, while participants reflected on past conversations, unfolding events were at the same time discussed nearly in the moment. As a researcher I further had the interpretive advantage of first hand exposure to the interactions being discussed.

The analysis is also clearly shaped by its theoretical framing, including the theory of direct deliberative democracy, critical social theory and a broader socio technical systems approach. This implies that the study frames interaction in terms of concepts such as power

and representivity, and further actively seeks the role of technology therein. Given an interpretive, constructivist approach, it is not surprising that I elicited evidence that relates to the role of the discussion list in participants' construction of a sense of community, nor that I found evidence of online governance itself as a co-constructive process. Further, my focus on the online toolset may magnify its role in the complex social system - it is perhaps inevitable that the study privileges certain forms of interaction as a result of its design. Leaving a clear audit trail at each step of the research process allows the reader a degree of judgement in the interpretations I make. An awareness of these issues further shapes the following discussion.

6.3 Socio-technical perspective

This section focuses on the mediating role of technology at hand of key observations made during analysis. In the literature review, I proposed a view of technology influenced by Kling's "socio technical systems" approach. In other words, technology is not treated deterministically, but rather as part of a system where it has systemic effects, and in turn is impacted by the system it becomes part of. The systems approach implies that technology is embedded in context, in this case the governance of a small community, through which the reciprocal influence must be understood. Within this framing, transaction cost theory (TCT) provides an explanatory mechanism by proposing we look at the influence of technology as a shift in the matrix of opportunities and costs afforded to users within the system. In the socio technical systems paradigm, these might for example relate to the roles and relations created, the actions afforded, and perceived impact or contingency of those actions. Markus' (1994) theory of the rational actor addresses the extent to which these shifts in cost and opportunity are within users' conscious control. The theory proposes that users engage in metacognition - they have at least some insight into, and deliberately make use of both positive and negative affordances of the technology to achieve particular goals, much as the results are not always predictable. I clarified also that, as it is used here, the

mechanism of TCT is not intended to develop a formal economic model of interaction, but instead to support our understanding of the choices that users are faced with as a result of changes in their environment.

I accordingly discuss my observations in Chapter 5 about local interaction, and more specifically observations relating to the dynamics of interaction on the governance list, in light of this theoretical framing. Observations are presented at hand of framing questions (italicised) to make the discussion easier to follow.

6.3.1 Impact of the lists on the nature of local interaction

I commented earlier on the technology of the email lists as relatively unsophisticated. How might the lists none the less have directly impacted interactions between residents?

The five conversation patterns I identified show the range of communication that residents chose to engage in on the lists. While one or more of the communication patterns may similarly have occurred offline, the time and spatial constraints of a face-to-face meeting does not afford the same breadth of interaction. The asynchronous timing of communication via a mailing list - not everyone needs to be present at same time, nor in the same physical place - allows more people to be part of the process and gives opportunity for a wider range of contributions. Email also affords more immediate communication - a resident can engage the community directly following an event without having to call a future meeting. Because messages are 'pushed' to subscribers, the conversation unfolds in near real time. Earlier attempts to use an online forum instead of the mailing list had limited success exactly because community members visited the forum too intermittently. Those who made the effort to contribute to the forum reported in interviews that they lost interest after seeing no response for weeks, or having a narrow segment of the community as their only audience. The mailing lists in contrast gave the sense that a message had been 'broadcast' to the majority of the community. Even people

with relatively little interest in community governance were on occasion provoked to respond after seeing community messages while scanning their email inbox.

In light of the transaction cost framework discussed in Section 2.3.3, one might say the email based list lowers aspects of 'search cost' evaluated in comparison to a web based forum or also face to face meetings. New messages are 'pushed' to a broad audience very efficiently, and community members can stay informed about local affairs without having to actively seek out information. At a purely operational level, the 'openness' of the lists supported day-to-day activities in a way that would have been impractical to do in other media: events are advertised, activities co-ordinated, quick feedback given on services, progress or lack of progress reported on. The increased volume of information however introduces the predictable problem of information overload. In this regard the ability to filter information has further impact on search costs, an area where one might argue broadcast email affords poorer functionality than a web based discussion forum. In terms of 'negotiation cost', the cost to enter into negotiation is lowered given how easy it is to engage others in deliberation, very nearly in the emotional moment. This leads to more frequent attempts to engage others in negotiation. I consider in the following sections how the mailing list may however also increase the cost of negotiation – for example by affording very loosely structured communication, where the deliberation frequently regresses rather than being moved towards a conclusion.

I examined the largely 'instrumental' contributions made by day-to-day email interactions in the previous chapter. The original goal of the list was to reduce the cost of local co-ordination, which it appears to achieve for those given the charge of local governance affairs, as well as for residents engaged in community affairs. There are relatively predictable requirements in turn - the necessary tools, infrastructure and skills to be able to make use of email. While the vast majority of residents have access to and use email

anyhow, it is also important to bear in mind that the email list was intended as a supplementary, rather than primary communication channel. Superficial analysis might conclude that, bar challenges related to filtering additional information, the lists were an unqualified success. However, changes to the cost of negotiation introduced by the lists however demands a more nuanced look at the costs and opportunities associated with local online communication.

What role did communication beyond the instrumental potentially play on the lists, and how might it have been impacted by the technology?

My own analysis of the online discourse, triangulated with feedback from interview participants, suggests that even apparently ‘simple’ messages more often than not carried layers of meaning. Significantly, the meaning is not only re-constructed in my analysis, but was readily pointed out by other participants during interviews. A message advertising an event might implicitly make a normative claim - “as a conservation village we should do our bit.” Another, proposing a practical solution to baboon raids might equally be an act of dramaturgical self-presentation: crafted to create a particular position for the contributor in the governance process, to assert themselves, and furthermore to convince others of implicit normative ideals. The ‘secondary’ purpose may in fact be the most significant outcome of a contribution given that the issues being discussed are in some cases intractable, while the public self-presentation has much clearer short-term impact.

The online space afforded by the list does not fundamentally alter what can be communicated - a typical speaking turn at a meeting might go through a similar range of expressive or dramaturgical communicative acts. It is however interesting that these lists were considered an appropriate venue to make expressive contributions. Though the lists were implemented as a ‘tool’ to reduce the overhead of co-ordination (and to reduce what might be referred to as ‘search costs’ in terms of Cordella’s transaction cost model), they

had evolved to have a significant impact also on the cost of negotiation. The email lists might accordingly be considered a 'space' as much as a tool - an extension of the public sphere. Rational actors are aware that while they make a contribution to the debate, they are also presenting themselves and so engage in what Habermas (1987) might refer to as "dramaturgical action". The rational actor engages knowing they bring, at least partly, their offline reputation with them - and knowing also that what they do will have a direct impact offline. In other words, not only are issues and the values that underlie them negotiated online, but also the reputation or role of participants in the social system.

In a few cases these acts of either self-presentation or normative framing failed conspicuously, possibly because on the list there is no sense of public opinion, no nodding heads or noises in a room, no visual feedback as the communication is being composed. People therefore dramatically misjudged how their comments would be received – the cost of negotiation increased by the uncertainty, and by the potential public damage of a misconstrued public conversation. There were a number of instances in the case study where residents attempted to reframe or qualify their contribution in more words than the original message contained. A few of these cases were sufficiently controversial that interview participants could remember details more than a year after the event. The transaction costs associated with 'soapboxing,' or taking more than a fair share of speaking turns, are also significantly different online than at a face-to-face meeting. At a meeting etiquette demands that people are given more of a hearing, though this is typically mitigated by the presence of a facilitator with the authority to ensure that others are also given opportunity to speak in the available time. The negotiation cost is increased because others must be heard out, but at the same time, there is precedent for cutting short unfair turn taking. Online, conversely, the cost to others of someone taking more than their share of 'speaking turns' is low. As a result the moderators of the community list published all messages without attempting to enforce rules of 'fair use.' They also reported that any

form of control quickly lead to accusations of censorship – because the process could not be conducted transparently. Instead, they relied on the fact that readers are not forced to ‘hear out’ a speaking turn in email, they could (and did) simply delete messages by people they perceived as irrelevant or noisy.

While filtering messages to reduce the cost of both search and negotiation was frequently raised in interviews, the relative tolerance online of frequent communication did none the less afford some participants the opportunity to present themselves centrally in a debate by the sheer frequency of their contributions. There are examples in the case study where someone was afforded a more prominent role in local affairs because of their noisy contributions. In some instances, this related to a particular issue only, what interview participants would refer to as the poster’s ‘hobby horse’. In other cases the contributor posted more broadly, creating for themselves an implied role in community leadership overall. Certainly, whether intended or not, the list had the effect of reinforcing the ‘officialdom’ of the local ratepayers association - members made frequent posts on official business, on occasion even forwarding government announcements. This afforded the RRA the opportunity to act with more authority than they might have been able to otherwise - though the role was perhaps less welcome when residents in turn addressed the RRA with demands rather than taking direct initiative. In order to remain focussed on the discussion of technology, I will return to the topic of authority in Section 6.4.3.

To what extent did the hyperlocal and direct character of online communication draw upon and, in turn promote, construction of local pragmatic understanding?

The ‘shared but unspoken’ background to local communication is based on relatively extensive shared experience afforded by proximity and length of association. At the same time, the pragmatics are co-constructed and necessarily partial: each participant brings with them, and continually re-constructs an imagined community that they position themselves,

their communicative adversaries and the governance issues within. The environment by which pragmatics are constructed in the first place is significant - one might argue that what pragmatics gain in depth is often sacrificed in universality. Some of the pragmatics that shape local communication relate to the history of interaction between individuals, transmitted second and third hand in informal conversation. In the process information is distorted, what is conveyed unavoidably partial. This in turn has a significant shaping influence on communication on the list: I've discussed how people evaluated the communication of acquaintances differently to that of strangers (Section 5.3.2). While in some cases the grasp of local context aided communication, it could also do the converse - in many cases online spats were mainly the result of older, offline disagreements.

The lists in turn also played a role in the construction of local pragmatics. Because of reduced search and negotiation costs local topics had been discussed in greater depth, over a longer time span than might have been afforded otherwise. While local pragmatics are more usually constructed in private conversation, communication on the list was always 'public', always engaged first hand. As a result local governance conversations became informed by the more general shared history of online communication, as well as the dynamics within the community revealed in the process. This in turn reduced particularly the cost of negotiation - even where there was disagreement, participants better understood the values and perspectives of others.

Interview participants agreed that their sense of the community was enlarged through exposure to the community list. They interacted with people they had not previously met, and were exposed to a broader range of issues and opinions. While many felt the community lists should none the less be divided further by topic to make messages easier for them to filter messages, one might argue that part of the opportunity afforded by the list was exactly that participants were exposed to a broad range of local governance issues and

opinions. Interview participants were further concerned with the ‘truthfulness’ of the image projected by others in the discussion list. Some argued that the lack of visual cues on the list allowed a contributor to construct a version of them-self online that did not match their offline behaviour and so could not be trusted. The risk, my interview participants proposed, was that they construct an imagined community on poorer evidence. This would suggest that the cost for presenting oneself falsely is relatively low online, while the search cost for others is high – it is harder to establish the veracity of online presentation of self. Other participants disagreed, proposing that interaction on the list is exactly more honest because of the narrower ‘information bandwidth’ - participants felt less compelled to be polite, less embarrassed at being direct with others. They pointed to especially emotional expressive posts to support the argument. In terms of transaction cost, this would imply in turn that the cost of being truthful during negotiation is less online than offline – people feel less vulnerable, or at least less directly intimidated to speak their mind.

It is likely that both aspects are unavoidably part of interaction on the discussion list - and that rational actors are aware of the possibilities simultaneously for unusual frankness and a degree of deceit. In the local context, the online evidence was somewhat mitigated by what participants experienced of others offline. Whether the offline projection is more ‘truthful’ is open to question - William James (1890) famously claimed a person “has as many social selves as there are individuals who recognise him.” I would argue that communication on the lists lowered the search costs associated with coming to a shared understanding, or at least to a shared sense of meaning on the basis of both broader and more long-term shared communication.

6.3.2 Impact on decision-making in local governance as a result of the lists

The next group of observations move from the dynamics of resident-to-resident interaction to questions about the impact this has on decision-making in local governance. The goal is

to support subsequent discussion relating to democracy, and so I try not to pre-empt the topic while I explore the observations here. I discussed in the literature review that the process of governance is often oversimplified and held to idealistic standards. In this study, governance is more often observed as an imperfect process in spite of the best intentions of those involved. In some cases the public good comes about in spite of a process that is – as some study participants argued, necessarily – neither truly transparent nor fully democratic. It is not unexpected that the use of online media becomes embedded in this complexity, and may for example simultaneously empower while it serves less desirable ends.

How did the online deliberation impact the process of governance decision-making?

I draw the distinction here between the process of formulating a plan of action or proposed solution (decision-making) and the taking of a final decision (decision-taking). While my analysis of the discussion archive found evidence of sustained deliberation as decision-making, there was no evidence of collective decision-taking on the list. This is not to say that the online deliberation had no impact on governance decisions or outcomes, but the absence of binding outcomes to deliberation was conspicuous. There is no single reason why this was the case - the factors that contributed appear to be a combination of technological affordance and the choices users made. I explore possible contributing factors in the discussion of further observations in the rest of this section.

To what extent can the online deliberation be characterised as a rational deliberation of governance issues?

In contrast to the Habermasian characterisation of “the force of better argument”, interactions on the list were often not so much a rational weighing of evidence, as the expression of feeling or of an un-argued normative position. I discussed the relative merits and problems associated with both instrumental and expressive contributions in an earlier

section, so will not repeat the comments here. Instead, I focus on the role of technology in privileging or disadvantaging particular modes of interaction.

One would expect that asynchronous communication in an email list affords more considered argument than a spur of the moment speaking turn might. Participants have the benefit of verbatim, first hand evidence of all earlier conversation - which I did find was often quoted – potentially reducing search costs and making for more accurate communication. An argument can further be constructed at length - there is the time to compose, and the opportunity to deliver a message of almost any length. One of the costs associated with face-to-face negotiation is that arguments need to be constructed ‘on the fly,’ questions require responses in the moment. Certainly, some people made use of the opportunity online to attempt to present extensive arguments for their cause. However, in the interviews I conducted, most fellow list members also expressed annoyance at what they perceived as ‘soapboxing’. “What I want is a sound bite,” an interview participant proposed, claiming that they deleted, or at best skimmed long messages. I introduced a longer message in the card sort exercise also, and found that often interview participants misinterpreted the author exactly because they had skimmed the message too quickly, subsequently revising their characterisation when given the opportunity to read with more care. It may be that the expectations that people have of email lists preclude long messages. While in theory the cost of search and negotiating should be less for text based argument - which can be skimmed, searched or simply ignored – people appeared to be less tolerant than they may have been of similar spoken arguments at meetings.

An interview participant further commented on the rhetorical devices used in messages - for example using criminalising terms to describe baboons’ behaviour: “gangs of baboons”, “raids”, “stolen”, “violence”. In terms of communicative form, the email messages afforded a mix of formal, public meeting and private conversation that regularly

lead to explosive outcomes. It is commonly reported in the literature that, as a result of relative anonymity, contributors have less reserve online. It may also simply be because the medium is immediate - messages are posted in the moment. In some cases, expressive contributions were simply a matter of someone letting off steam - though not all participants interpreted them this way. Most interview participants expressed dislike of strongly emotional or expressive contributions - much as it was too much work to wade through lengthy argument, it was emotionally taxing to be subjected to a 'rant'. The relatively high incidence of expressive language in other words greatly increased the negotiation cost for participants on the lists. People reported that often they deleted these messages without reading - particularly if they identified the author as a known 'ranter'. Yet rants had the potential to galvanise collective action by showing an individual's distress, and sometimes by threatening more aggressive measures. From rants stemmed some of the most constructive dialogue on the list - not as much for being reasoned, as for extending the boundaries of norm or opinion, forcing out the range of opinions held. An expressive contribution motivated action, much as its position was not always reasoned.

If not decision taking, did the online deliberation move governance issues 'forward', in other words nearer to a collective conclusion?

Rather than a series of deliberative events with clear resolution, what I observed was an on-going process. As I had outlined in my discussion of patterns, only in rare cases could one speak of deliberative progress in linear terms. This relates to the earlier discussion of deliberation in the first place as consensus building, or as the means of finding constructive courses of action in the face of irreconcilable pluralism. While deliberative progress in the sense of 'coming to a conclusion' was seldom made, one might argue there was progress at the expressive level - by establishing the range of normative positions and so establishing the basis for devising commonly acceptable solutions. That said, the discussion appeared at times to regress following an emotional rehashing of arguments that had been dismissed, or

with solutions being insisted upon that had been shown to be unworkable. While merely being able to make the claim that certain arguments or solutions had been dismissed implies some form of deliberative progress, it may be a feature of communication on the list that the deliberative process is relatively easy to derail. The discussion list presented an on-going argument with no clearly set agenda. I discussed earlier that, while this may have lowered the cost for participants to contribute to a broad range of topics, whenever they felt the need, this may have in turn increased the cost of negotiation overall. Unlike the face-to-face meetings of the community which were facilitated through some form of convergent structure, on the RRA and Baboon lists there were no briefings in advance, no prompts to move to the next stage of discussion, nor any forced conclusion. This is as much a feature of the moderation style, as afforded by the lack of expectation (of more formal process) in this asynchronous mailing list. As a result interjection was allowed at any point, making it possible for a single combative participant to derail what appeared to be a constructive process. The disruption often gained temporary legitimacy because, without additional cues, it was not always clear where other participants stood on an issue - no shaking heads or noisy interjections from the room. A more formally moderated discussion would not have afforded the same opportunity for disruption where argument is driven ahead with specific opportunities for input, the facilitator balancing speaking turns. The model implemented on the list has positive and negative aspects - while the openness to interruption can disrupt fragile deliberative progress, it does partly prevent genuinely new contributions from being stifled by an impatient or intolerant majority. A process of negotiation where there is little disagreement has proportionately lower negotiation cost to participants, but potentially also reduced value in terms of governance.

Asynchronous communication is more likely to allow a contributor to write 'in the moment'. This does lead to messages that are more likely to be driven by strong emotion than a speaking turn, at a meeting months later, might have been. It has the further

disadvantage that the reader is most likely in a very different frame of mind to the author. In other words, the online list affords an on-going debate where people are often out of synch with each other, occupying different physical space but also functioning in different communicative mode. The author is excited by something that happened to them and makes an expressive outburst - the reader in turn, wading through a long list of incoming mails, is simply annoyed by the message. While governance decision-making has been framed not so much as a matter of “finding” consensus that pre-exists, it may be that some of the features of online media require careful moderation to not become destructive of the process of constructing the basis for collective action.

How did the online deliberation impact the transparency or ‘openness’ of the governance process?

I commented earlier that all arguments on the online list were effectively public - any resident could access a verbatim transcript. Yet the subsequent processes of decision taking, as well as the resulting governance actions, were often conducted in private. An interview participant remarked that the community list offered a welcome change from the way governance was “usually done”. A small and relatively closed group of residents (most often the RRA committee) would call a community meeting on an issue and invite who they considered “interested parties” to participate. In theory the meetings were open to all, though in practice rarely attended by more than one or two people other than RRA committee members. The participants were typically considered a decision-taking quorum purely by virtue of their attendance - those sufficiently informed to know about the meeting, and further motivated to attend were afforded the only real input into governance.

The community list in contrast did not afford closed meetings of just the “interested parties” in a particular issue - all arguments were made in public where anyone could insert himself or herself in the discussion. While this may have increased the cost of negotiation,

it also provided greater transparency of the governance process. There is however evidence that exactly this feature of the list had simply driven more contentious meetings back offline or into alternative online venues. A group of residents had set up their own, private discussion list online to caucus about a particular issue, while the RRA in practice conducted much of their work in closed meetings as before while giving the appearance of greater transparency through the list. This may be an example of the link that Coase proposes between transaction cost and organisational process or form: other things being equal, people work towards forms of social organisation that minimise transaction costs. In this case, where negotiation had become more troublesome (even if potentially more transparent) the process of decision taking was driven back offline.

It may be that the lack of decision taking on the list was partly the result of deliberate omission by the moderators - an omission that was more easily afforded online where there were expectations of what interaction should achieve. The residents association created the list, and actively moderate it, as an instrumental tool in the first place to support their work. It provided them the means to give residents information, to advertise and co-ordinate collective action, to ask for feedback and to provide a litmus test for the choices they make. My interviews with the RRA chairperson left the impression they did not set out to create a deliberative space or an extension of the public sphere. This is understandable - the cost to them would possibly be greater than the coordinative benefit. While they claimed to want to operate transparently, their work would be impossible if they continually allowed other people to derail it - particularly with poorly informed criticism. The RRA needed to manage opportunities for poorly considered 'sniping' by people who did not make the effort to become involved or even just to be well informed. In their opinion, the mailing lists particularly afforded this form of negative interaction and so opinions were solicited online, but the results not necessarily shared. In practice, action was often taken as before, by the decisions of a few willing to engage first hand in governance.

Residents, in turn, viewed the list in a range of ways: as a tool to have their own message shared, but also as a space where they can hold the RRA, or other community members to account because of its public-ness. While ‘enforcement costs’ do not have a direct equivalent in this context as there are no contractual terms to enforce, one might say enforcement costs are lowered when residents are able to hold both community leaders and one another to account online. Online public deliberation did however have disadvantages over more personal forms of communication. People reacted differently when subjected to the peer pressure of an open forum and issues were more easily escalated. Those who risked making their opinions known sometimes found themselves publicly unpopular, or subject to attack by abrasive or combative participants. Most interview participants commented on the personal risk involved in posting a public opinion. Some thought also that the community list paradoxically moved issues beyond local control. Once public, they felt that the options for an internal, personable resolution were reduced. The relatively ‘laissez faire’ style of local governance was replaced with a process of escalation and depersonalisation. On a number of occasions this, in their opinion, resulted in the issue being reverted to government, or to the legal system by taking an issue to court. However, in at least two cases the legal system was likely to have been engaged anyhow. Further, at least one of the issues mentioned under “deliberative mediation” would certainly not have been solved personably otherwise - in fact, the list was the last resort before contacting authorities to euthanize the animals under discussion.

Was the process of governance more ‘even-handed’ as a result of online deliberation?

The discussion of conversation patterns exposed the ways in which both internally coordinated stakeholder process and internal conflict resolution may be all but impartial. Interview participants confirmed this – many for example picked up a degree of ‘mob justice’ under the guise of communitarian governance. There was low associated cost for

someone to “call” a meeting - simply by posting an issue. The cost was further low also for others to add their voice to the argument exactly when it suited them. There was however no sense that the opposing party must have fair opportunity for response. Instead a group of people acted to resolve a problem in a manner that they perceived served the communal interest. In terms of the transaction cost model, the negotiation cost was in other words higher for the defendant than for those complaining. In some cases the alleged wrongdoer would subsequently revert to external legal process: partly because it represents a ‘higher’ authority, but also because the authority was impartial compared to being mobbed on the community list. There was a better chance to have their side heard, and they have clearer protections under law – this was one way to bring negotiation costs back into balance. To be fair, similar dynamics occurred in offline meetings, with equally heated exchange. The difference perhaps was the relatively low “cost” to those complaining online, the ability to immediately reach a large audience when they thought it likely their complaint would have popular support. This proposes also that while the discussion lists provide new opportunities for ‘enforcing’ what is considered locally acceptable behaviour, they may not be the ideal venue – particularly where an individual is unfairly singled out.

I commented earlier in this section also that moderation of the list was not impartial. I leave the discussion of this as a normative issue to the following section, but consider here from the socio-technical perspective how online list-based technology might afford particular sorts of interaction. There may be multiple agendas (or different levels of objective) present at any one time - some certainly empowering of ‘the community’, while at the same time disempowering individuals or alternatively inequitably affording power. In a small community, the governance process is significantly influenced by a few charismatic or manipulative personalities. In this case study, one might argue the list had in many respects become the tool of a few individuals. While they may have had the best interests of the community at heart, their status as administrative volunteers meant they did

not have any constitutional requirement to be impartial. On some occasions, there was the elaborate appearance of giving both sides a hearing, while moderation practices none the less definitely favoured one side of an argument. Counter arguments were cut short, positioned unfavourably, or even paraphrased rather than being posted directly. This happened offline also - where meetings could be chaired with obvious bias, particularly if the opposition were in a minority position. However, the meeting chair did not have same degree of control as a discussion list moderator - they could not literally edit the words of another to create a paraphrased version. More so - they could not act as a gatekeeper, potentially not forwarding comments at all. Offline, the expectation that some form of 'Robert's rules of order' would be upheld precluded this. On the discussion list, there were fewer such protections.

To what extent did the online deliberation impact the balance of individual empowerment within the local governance process?

From the discussion thus far it follows that participation in the local governance process was not distributed evenly - some had stronger say or input than others. The opportunities to act were also not always equal, and the process not equally visible to all. This had its roots in offline roles (and associated status) which were carried to the online context: people interacted on the list as residents, but also as committee members, lawyers, CEO's and governance officials. Status aside, some people are also simply more charismatic than others and so more able to influence or incite action. Even if a relative social outsider were to volunteer to be chair of the residents association, they would not have been elected. If a person was not charismatic or had weaker social skills, they were not afforded equal voice offline, and as a result they had proportionately less input to governance. One might argue that all had an equal vote, though an interpretive, constructivist account of governance would claim that by the time votes are cast the process of 'reality making' had already been concluded.

I discussed earlier in this section how the authority, or at least the official position of the RRA was recognised and also strengthened on the list. Moderators - all members of the RRA committee - particularly had the ability to influence governance as discussed above. For residents, an offline role could also be imported. In some cases dramaturgical statements were exactly an attempt to establish a pre-existing role on the list. Certainly some of those most empowered offline used the list to further strengthen their ability to influence and act. There is however evidence that the list - if not even empowering - at least additionally empowered a group of people who would have had no role in governance otherwise. The list allowed different styles of communication, required different skills, applied in a distinct 'venue'. This potentially allowed a new form of charismatic speaker to make their mark: people who were timid and socially withdrawn in face-to-face interaction; older people who had been unable to join community meetings that continue into the night. Others simply felt co-opted at face-to-face meetings chaired to a particular agenda. Certainly, in this case the online list afforded a more open-ended process, without a formal agenda set by the RRA. As a result, the list afforded not so much a blank slate, as a new space providing an opportunity for people to establish a position (or new relations) that in turn may have renegotiated their position in the broader social system. In a few cases, interview respondents commented on their newfound respect for someone as a result of the online communication. One such person had for example taken a central role in the baboon debate - not so much because they attempted to create a position for themselves, as because of the respect they gained for the ability to reason and communicate clearly in writing. In the process, the "pragmatics" of local governance were effectively renegotiated as the relations or power positions between people were altered.

It must finally be acknowledged that not everyone was able (or chose) to be a participant on the list. On the one hand, one might argue there was no alternative venue that was

clearly more inclusive. Comparing the list to offline meetings suggests it involved a much larger segment of the community - much as offline meetings were still considered more authoritative and presented an alternative venue for those not engaged on the list. That said, the list had become a public space which neither residents, nor the RRA could afford to ignore. As the community list became more established, anyone with interest in local affairs had to engage there or risk being at a deliberative disadvantage offline. My conversations with interview respondents who disengaged from the online list highlighted how they had subsequently grown “out of touch.” Their arguments were disadvantaged by not having the benefit of long term visibility in the public sphere, untested against opposing opinion and the delivery unsure of where others stand on the issue. During the public meetings I attended, there was a clear sense of irritation with ‘newcomers’ who attempted to engage in topics that had been talked through on the list and already reached either resolution or impasse. They were given very little audience.

To return briefly to the transaction cost model I made frequent reference to during the discussion, it appears, in summary, that while ‘search costs’ were reduced for residents and the RRA committee by having immediate and first hand information through the lists on local issues, there were still aspects of search cost remaining, particularly in form of an overload of new information. Aspects of negotiation costs were also reduced – residents had open and direct access to the deliberative process, and potentially benefitted from a greater degree of shared pragmatics or common ground from which to approach collective solutions. Overall, the cost of negotiation may however have been increased by the greater volume of communication, by the frequent use of expressive language, and by the loosely defined deliberative process that had been afforded on the lists. Filtering messages more effectively - for example by splitting lists into more topical areas - may reduce both the search and negotiation cost for participants. However, by participants’ own acknowledgement, it is the breadth of issues and opinion that they were exposed to on the

list that contributed significant value to local governance. While expressive communication was further poorly tolerated, it also had significant benefit. Rather than simply altering the transaction cost associated with local governance, the lists may have provided significant to local direct democracy. Finally, while residents are able to hold others to account on the lists, lowering aspects of enforcement cost, there is the risk that individuals or minorities are bullied in the process. In this case, it was not so much a case of enforcing a previously agreed contract, as of enforcing the opinions or values of the majority or those in positions of empowerment. The following section accordingly considers these observations in the light of the normative framework provided by the theory of direct deliberative democracy.

6.4 The perspective of direct deliberative democracy

Discussing the mediating role of technology from a transaction cost perspective gives some insight into the social costs and opportunities introduced with an online discussion list. However, more than being able to say that the list disadvantaged or privileged particular aspects of interaction, I had set out to evaluate the resulting socio-technical system against the normative standard of direct deliberative democracy (DDD). The discussion in this section accordingly follows from the introduction I made of DDD in the literature review, moving from specific, circumstantial detail back to the broader fundamental principles of democracy.

I begin by discussing the outcomes of the previous section in light of common challenges cited of operationalisation of DDD. From there I reflect on the process of deliberation afforded by the community list, followed by considering the dimension of directness versus representivity. The discussion concludes by reflecting on findings in the light of two foundational values of democracy: intrinsic equality – that all are equally fit to contribute to decisions that affect the general welfare; and personal autonomy – that all have the right

to be self determining, in other words to contribute to decisions that affect them to the maximum extent possible. Closely related to this, I had earlier quoted Arendt (1960) on democracy as the “freedom to”, rather than purely “freedom from.” In other words, the proposed goal of democracy is to afford a socially generative process in the balance of equality and autonomy. I accordingly consider the ways in which the socio-technical affordances of the discussion list may have been a driver or modifier of local collective action.

6.4.1 The challenges of direct deliberative democracy revisited

In the Literature Review (Section 2.2.3), I summarised four common criticisms of direct deliberative democracy: the difficulty of coordinating direct participation, the expertise required of participants, that deliberation is not necessarily the sole, ideal mode of participation, and the often underestimated dynamics of power in deliberation. The following section discusses each of these in turn.

Given the scope of national or even regional governance, both the scale and complexity of interaction makes it difficult to co-ordinate direct participation. Citizens in turn have limited time to be involved, and DDD has what Vedel (2006) refers to as a potentially “demanding conception of citizenship” (p.232) - it requires more than casting the occasional vote. While I argued that the scale of governance at the hyperlocal level significantly mitigates the issue, the case study proposes that localisation none the less does not guarantee broad engagement. Only 38 people attended the largest event in the governance calendar of the case community, their ratepayers association AGM. Far fewer residents still were directly involved at a day-to-day level.

It appears that the community mailing list did a great deal to help co-ordinate and reduce the ‘cost’ of some aspects of direct governance. Online communication made it easier for

community leaders to arrange events, to co-ordinate action, and to poll residents for opinions. The list allowed people to participate asynchronously, when and where it suited them. However, the discussion of transaction costs in Section 6.4.3 implies that some of the coordinative challenges remain, or that new challenges are in fact created. One challenge is simply the degree of cognitive effort, rather than time required. While email deliberation requires less time of participants, or at least allows more flexible time scheduling, it none the less demands that participants engage with governance issues. One of the most consistent complaints raised by interviewees was the level of conflict on the list, and of being 'bombarded' with messages on topics that the person had little interest in. Even online this was too demanding a conception of participation for many, who disengaged by unsubscribing from the list. The lack of decision-making may have been a further indicator of logistical challenges on the list. I found it interesting that often the outcome of online deliberation was an offline meeting - as if to ensure all participants were 'on the same page', and that action had more formal sanction. These offline meetings would often involve only those most strongly engaged in an issue - in part judged by participation on the list. That said, the ratio of participants online reflects that the list was a far more representative venue for governance deliberation than any face-to-face meeting - even the ratepayers AGM.

The evidence provided by the case makes an interesting, if highly contextual, counterpoint to scholars who claim that digital democracy is largely a myth (Hindman, 2008; Vedel, 2006). Their studies, perhaps as a result of their top down methodology, miss the potential for direct democracy at the hyperlocal level. Lists such as these, or the community forums cited from literature are largely invisible to their analysis. That said, the picture that emerges from the case also does not match the ideal that Shirky proposes - of large groups co-ordinated relatively effortlessly (Shirky, 2008). That may be true of some forms of social collaboration, but by the evidence at hand, not of local governance. In some ways, it

appears the increased opportunity for interaction in effect creates more space for conflict, which in turn increases the demand of participants. It would appear that, even with the logistical complication of face-to-face meetings greatly reduced by online tools, direct governance still has a demanding conception of citizenship - it takes both physical and emotional effort to take part.

The second common criticism of DDD is that 'the public' do not have the specialist skills or expertise provided by a representative administration. Most citizens are further not skilled deliberators – they may not give the best reasons, nor make the most astute decisions. Again, the hyperlocal context plays a significant mitigating role: if anything, the residents were the experts on most topics discussed in the list. What this investigation further challenges is the 'professionalisation' of governance. While undoubtedly specialist skills are required in the context of formal government, the practice of sound local governance is less driven by organisational complexity. Residents in the case community had formidable professional capacity - they included lawyers and environmental specialists, business negotiators, union leaders and skilled facilitators. This suggests the notion of 'the public' may be employed in an overly patronising manner, and this distinction extends to the online list. There are none the less valid challenges to the governance expertise of local participants. For one, it is important where people acquire issue related information. I discussed earlier that each participant's grasp of pragmatics, even at hyperlocal level, is necessarily partial. Often enough the primary source of local information is 'on the grapevine', through friends and neighbours, with social knowledge passed on second or third hand as gossip. In this regard the list may have played a significant role by exposing people to a broader range of facts, values and opinions than they are likely to have sought out otherwise. The email list has the further advantage that these opinions are propagated first hand, and archived verbatim for later reference. I mentioned also how the list was used by those with specialist or issue related knowledge to

brief fellow residents - in some cases going as far as producing packaged information hand-outs.

The third criticism is closely related: deliberation typically relies on a particular discursive style - formal, rational, deductive and generalised - and so potentially excludes people who have a different style of communication (e.g. emotive or narrative), and also the information conveyed by these styles. Put differently, proponents of formal deliberation discriminate against preferences that are not stated in the preferred deliberative mode, by proposing that only 'properly deliberative' claims are legitimate. I touched on this issue where I discussed the notion of instrumental versus expressive deliberation in Section 5.2.4, and will return to the topic later in this section. In the investigation of patterns of conversation, I also commented on the range of contributions that people practically made to the community list. While the range of contributions may not fit the formal definition of deliberation, they may serve a similar function in the long run - to communicate a point of view, and to contribute to the actions that are taken. This potentially broader definition of the deliberative aspect of DDD is nearer Hauser's "vernacular rhetoric" than Habermas' ideal "force of better argument". The notion of vernacular rhetoric is echoed in the proposal by Cohen and Sabel (1997) that the local context affords less formal, more inclusive forms of interaction. Participants might contribute to an outcome by their mere presence, by providing an audience and non-verbally showing support for a motion. The extent to which participants engage in dramaturgical action, and the evident care people take with their communication clearly acknowledges the audience. An earlier attempt to create a community forum, using a website instead of mailing list, lacked both the scope and immediacy of audience and as a result failed to establish itself as a governance platform. Admittedly the mailing list affords relatively little evidence of the audience (other than those that directly respond) - there are no nodding heads or dissenting noises, not even an indication of how many are "listening"

to a particular thread of discussion. Participants do however still noisily leave meetings, practising the proverbial “door slam” by writing an angry public message asking to be removed from the list. The disadvantage of an online list is that this action permanently removes them from the discussion - though it was not unheard of for people to later join in again.

The relative lack of facilitation observed in the case becomes an important factor given the broad range of potential contributions. Where participants are not skilled deliberators in the formal sense, good facilitation may be especially important to move issues towards resolution. I’ve discussed that in many cases points are purposefully made in a non-rational way, and that arguments may be as much instrumental as expressive. As a result, while issues are explored from a range of positions, the discussion often unravels into recursive, disorganised and sometimes divisive argument. While the moderators of the list defend the absence of facilitation as proof of their neutrality - they do not appear to be steering discussion - it appears their reluctance is at least in part motivated by the potential difficulty of the task. Not only would the volume of messages require significant time for a facilitator to manage, the task has the potential to involve the facilitator in significant conflict. The moderators of the list, in their role on the committee of the RRA, frequently acted as facilitator or chair of public meetings. Face-to-face meetings however had a defined one or two hour time span, and they occurred only a few times per year. The facilitation task is more visible offline, with clearer expectations - almost everyone expects some version of ‘Roberts’ rules of order’ to be enforced. On the discussion list, facilitation is more likely to be accused of underhand tactics or collusion. Where other residents attempted to step in as facilitators, they were ignored or even ridiculed - not anyone would be trusted with the task, particularly not someone who patently has a stake in the issues being discussed. I have commented on the relative advantages of the more open, freely structured discussion on the list. There was no sense that anything was kept “off the table”

with a pre-set agenda - if anything, online discussion became a source of issues on the agenda for subsequent offline meetings. Nor did the list force a process with fixed turns for response. It may well be that a more formally moderated discussion shuts out some of the less formally deliberative opportunities. The deliberation would certainly lose some of the advantages and disadvantages discussed of asynchronous communication were facilitation to force a degree of synchronicity.

One might conversely argue that the difficulties with decision-making reflect Saward's argument that deliberation is necessarily democratically secondary, a component in the larger process of enacting democratic governance. He points out that deliberative process typically relies on aggregative mechanisms such as voting - because deliberation rarely leads to consensus. The community list was never used directly to support voting or a poll, though votes were often conducted at offline meetings. This may be because the list was not considered to have the same degree of legitimacy as a meeting, it was not sufficiently representative of the community, and it was not an 'officially' sanctioned meeting space. As a result, I discussed how decision-making most often reverted to traditional, offline mechanisms. There is strong evidence that the offline processes were better informed as a result, but one might conversely argue that avoiding formal online decision-making was to some degree a strategy of containment. Opening a topic for discussion online - where there is less expectation of binding decisions as the outcome of deliberation - gives the appearance of participatory process, while averting the need to constitute a binding mechanism where the outcomes may be more uncertain.

It is interesting that, in spite of engaging a far larger proportion of the community than offline meetings did, there was the tacit assumption that online conversations excluded too many. This opinion was expressed by the list originator (then chair of the RRA) during an interview. In hindsight, the opinion was perplexing given the evidence of participation in

archived meeting minutes distributed by the RRA. From further interviews with resident participants emerged a range of factors possibly contributing to the relatively low legitimacy of online deliberation: There was an established tradition of community governance meetings, while in contrast for many the online space afforded by the list was relatively unfamiliar, 'virtual', and so mistrusted. Others expressed a sense of co-option online - referring to the list as the RRA's list - implying a venue that was open to manipulation or undue influence. Perhaps most significantly however, the very openness of the list to disruption and to emotional, expressive language also worked against it as a governance venue. Both residents and members of the RRA expressed dismay at what seemed a "free for all", uncoordinated discussion that was mostly "hot air". There was a strong sense that face-to-face conversations could be facilitated more civilly, in the spirit of Habermas' communicative action. Many interviewees had moved to the community exactly because they were eager to escape the relative anonymity of living in a big city, to experience a sense of community which they felt was better expressed in the values of personal, face-to-face engagement. These values were expressed in interviews, but also repeatedly on the list. My own field notes of community meetings suggest that not all of these comparative limitations of the list are necessarily accurate - meetings were chaired with no less bias, and heated exchanges would very often result in groups of people noisily leaving a meeting mid deliberation. In several cases topics had to be abandoned because they risked derailing the meeting, and were tactfully omitted from future agendas. None the less, face-to-face meetings had become the 'formal authority' through which community opinion was filtered. Residents could make contributions where there was a stronger sense of being 'in public', where contributions were noted in formal minutes, and where collective votes were ultimately cast with a show of hands. Given some of the criticisms of dialogue on the list, it is also not surprising that the RRA do not consider it in their interest to promote more formal deliberation and decision-making on the list. From their perspective, while it offers strong advantages as a channel of distribution, or to elicit

feedback and co-ordinate collective action, as a deliberative decision-making space it risked making their governance task a great deal more difficult and open to regular disruption.

Related to the fourth criticism of DDD, that the dynamics of power are often underestimated in deliberation, I particularly discussed Foucault's position in the literature review. He is sceptical of the Habermasian ideal of dialogue "that circulates freely, without obstacles, without constraint and without coercive effects"(Willcocks, 2004, p.265) - power strongly influences what is considered true, and so dialogue is inextricably linked to power. Even in the absence of overt conflict or coercion, power might none the less control the agenda - by determining what is "on the table" for discussion, or more subtly by framing what role players consider in their interest. In light of the discussion above, power might further be expressed in the process of governance itself - the opportunities afforded for participation, for example, and the venues that are created as legitimate. The case material leaves the strong impression that, even in the relatively informal sphere of hyperlocal governance, issues of power cannot be ignored. While the evidence does not suggest an abuse of power in the oppressive sense - all participants appeared to be genuinely interested in some form of 'communal good' - there are inevitably competing interests, and competing visions of the ideal outcome of the governance process.

I observed that not all participants were afforded similar opportunity via the discussion list, and nor did all have the same capacity to make use of the opportunities that were presented. It would be naive to assume that an online list democratises simply because it affords broader communication than otherwise. I did note that the list perhaps allowed a shift in the balance of power by affording opportunities to participants who were previously on the periphery of the governance process. None the less - in this particular

case online tools were created and moderated by those who already had a degree of influence. In the process, the online space afforded them further opportunity to appear prominently in the governance process, and as moderators to steer toward what they considered 'constructive' deliberation. My interviews with moderators suggest that the online discourse was at times deliberately contained for fear that it becomes unconstructive, or that the resulting conflict sabotages what they considered a potentially fragile governance process. While this may ultimately have served the best interests of the community, it afforded members of the RRA a disproportionate hand in governance affairs in a manner that was not fully transparent. Conversely, I discussed also the potential unfairness of genuinely collective governance - where the online space allowed new alliances of power to be formed, and to be enacted in ways that approached mob justice. This can be profoundly oppressive of an individual - much as it is simultaneously empowering for those who find themselves able to whip up collective sentiment.

These conundrums are as much the result of the affordances of deliberation via an online list - its reach and immediacy - as of the forms of moderation or facilitation that were employed. Systems that strongly distribute decision-making, such as Wikipedia or open source software development communities, are often provided as examples of the success of a laissez faire approach to governance using online tools. In the context of local governance, it is unlikely that the democratic values of equality and individual autonomy are similarly served. This study provides a strong case for the community list to make arrangements for independent or at least more equitable forms of moderation or facilitation. Though fundamentally supportive of deliberative democracy, Gutmann and Thompson (2004) also acknowledge that deliberation can be used as cover for power politics. I discussed earlier their proposed remedy - that in such instances, the "giving of reasons" is its own best defence. This holds true in the case context - both individuals and community organisations are in practice held to account by the reasons they produce for

their actions. It is not clear this is sufficient however - reasons are only held to account to the extent that issues are “on the table” in the first place, and that the process afforded on the list allows equitable participation.

6.4.2 The nature of deliberation on the community list

I have already discussed significant aspects of the deliberative process in the preceding sections, so will take up the topic here only to the extent that further considerations expand the discussion.

I found that a range of communicative acts online contributed to local deliberative governance. The discourse of online deliberation reflects that the process is most often studied in the context of strongly representative administrations where public involvement is constrained to a relatively small range of inputs (Davies, 2009). The ‘sharedness’ of governance most often ends even before practical decisions are made. This understanding of deliberation shapes the design aspirations for the tools that are used to support the deliberative process. Research is for example focussed on mapping the structure of argument (Buckingham Shum, 2008), on deliberation leading up to opinion polls (Fishkin, 2009), the deliberative relationship between citizens and a city municipality (De Cindio, 2007) etc. In the hyperlocal context however, democratic directness potentially extends to enacting the choices that follow from initial deliberation. Evidence from this case study suggests that residents became active in enacting solutions, co-ordinating, and also evaluating outcomes - each of the steps involving smaller deliberative engagements that required particular forms of contribution on the discussion list. This suggests alternative expectations of the tools employed: to assist in the co-ordination of collective action, to help residents provide active feedback on results even as a governance process unfolds, to support all involved in dynamically adjusting strategy. The nature of the deliberative process is substantially altered when the tool does not mediate between a passive public

and active government, but is required to provide active support to residents who become involved in the governing of their world. Afforded by local context and the continuity of list-based interaction, communication moves from a series of deliberative incidents to a longer-term process requiring a broader range of deliberative contributions to support governance.

While evidence proposes the community list particularly supported the co-ordination of collective action, this did introduce new communicative challenges. My earlier analysis suggests that the community list significantly reduced the costs associated with co-ordination, becoming an effective tool to support initiatives both by the RRA and fellow residents. The list provided residents ready access to an audience - to enlist others in an initiative for example, or to ask for feedback on a proposed solution. Taking part in an activity did not require formal invitation - residents could provide ad hoc suggestions, question implementation, or provide new facts to inform action. The challenge with the community list was that the details of co-ordination threatened to overwhelm the broader debate. Residents were effectively required to have a single, on-going meeting to discuss both high-level policy and operational detail. In response, topical sub-lists were created for issues that generated high message traffic. Rather than affording different levels of engagement however, this split conversation into 'silos' - one had to either be part of the full 'baboon debate', or disengage entirely. For the same reason, feedback on initiatives by the RRA was returned in private email, which made the collective opinion invisible to all but the few directly involved in an initiative. These examples suggest some limitations of the chosen toolset - as it was implemented - for managing a more complex range of communicative processes. While, as a broadcast communication channel, the list served important purposes, it could not entirely replace alternative channels. I examined also the ways in which the online list afforded more limited communication than face-to-face interaction allows - the lack of visual and auditory cues, a limited sense of the presence of

other participants. As a result participants did not have a shared sense of deliberative movement - everyone was not 'on the same page' as they might more readily have been at a face-to-face meeting. This is not to imply substantive agreement necessarily follows, but rather that deliberative progress is much harder where participants find themselves at once in different stages of the deliberative process.

A closer look at deliberation on the list proposes reconsidering the intended purpose of online deliberation - particularly where it is seen as a mechanism to develop consensus.

With the broader understanding of the scope of deliberative contribution, I argued also against narrow definitions for reasoned evidence. In other words, to move beyond the instrumental understanding that deliberation would only have value to the extent that it contributes directly to problem solving, decision-making and co-ordinating action. In addition, expressive deliberation 'might make a statement' about the norms or underlying social meaning of an issue, rather than attempting to control the outcomes directly. The expressive approach (for example) considers deliberation intrinsically valuable as a "manifestation of mutual respect" among citizens (Guttmann and Thompson, 2004, p.22). The list provided increased opportunity for expressive contribution - in part because of its asynchronous nature that allowed people to communicate "in the moment" or otherwise at times when they may have been more reflective than in a public meeting. In many ways the communicative space provided by the list was strongly individual rather than collective. The analysis also highlighted the paradox that expressive language was none the less relatively poorly received - dismissed as either long winded or abrasive, with participants making every effort to save themselves the emotional effort of having to engage with the content. Email is further easily misunderstood, and the mode of communication leaves the deliberative process open to disruption. It is perhaps not surprising that online deliberation rarely appeared to 'produce' consensus, instead being considered divisive by many.

I proposed in Section 2.2.2 that the process of deliberation might however exactly move away from establishing mutually exclusive "positions" on an issue, polarising a faction 'for' and one 'against' a solution and then failing to reconcile the respective views. Assuming pluralism is unavoidable and not inherently undesirable, deliberation might instead focus on the underlying interests of stakeholders - and particularly the means of finding fair and mutually beneficial solutions. Even given the relatively low level of facilitation on the community list, I made the argument (Sections 5.2.4 and 6.3.1) that members have an expanded pragmatic understanding as a result, a clearer map of the range of values held by participants. If not so much common ground, the community were better equipped to find workable solutions that respected the interests of as many parties as possible. The challenge was that the process of decision-making none the less appeared to be happening largely offline. A deliberative decision-making process such as proposed by Kahane (2007) requires the costly exercise of getting opposing parties to the same physical space - assuming they are willing and able to do so in the first place. It also requires agreement at least at the level of process: how it is that a solution might be sought. While the community list provided a relatively low cost venue, it will require stronger facilitation than I observed for participants to come to a shared understanding of process. The tool itself - or to make the point more in spirit of the socio-technical systems approach, the social system created around tool – did not inherently resolve processual issues. While the instigators of the list did not have expressive contribution as their objective, it had certainly taken up the majority of their effort in moderation. In their opinion, expressive contributions had also become a potential threat to the continued success of list, with participants unsubscribing when discussion became too emotional. They would certainly have endorsed Hauser that "deciding public policy through argument has little to recommend it in terms of efficiency," though this analysis in turn would support the view that "the purpose of deliberation...is not efficient government but educated judgement"

(Hauser, 1998, p. 2). If anything, because of deliberation, those in charge of action found themselves spending a great deal of energy defending their position ('giving reasons'), having to enlist others in their ideas and guarding against being misrepresented on the list where all conversations are a matter of public record. While I have argued the open exchange of opinions ultimately has had a positive effect on local governance, it was often not a comfortable process for those involved.

6.4.3 How has the list impacted the democratic dimension of directness versus representivity?

Even in direct local governance, there is a degree of representivity evident. One might take the localness of the governance context to imply a relatively direct form of governance. I also presented evidence in Section 5.2 that both online and offline, residents become involved not only in making decisions, but also in enacting governance. The preceding sections have discussed some of the more and less obvious ways in which the list supports this direct participation. To the extent that the discussions between residents focussed on purely local matters, and in many cases did not need to devolve to an administrative representative, the governance process was perhaps as direct as residents were willing to be engaged. However, I discussed in the literature review that even in direct forms of governance, there are none the less potentially significant issues of representivity. According to Saward's "representative claim", a person or group in the community effectively create a constituency for themselves by enlisting others in an issue position they can then claim to represent. This accurately reflects what I observed in the case study. Many residents did become directly involved in governance through the discussion list - but only a few community activists subsequently acted as community representatives. Not only has the RRA as a representative body been implicated in many processes I discussed, there were also individuals who were afforded the power to enact a larger role in governance by virtue of being positioned as the 'champion' of a particular local issue. In

the case of the baboon debate, the originator of the list presented themselves as the community representative with the civic body overseeing the management process. In the case of the wetland development, two community members acted as liaison with city authorities and attended key external meetings on their own - much as they lobbied the community via the list to also express 'independent' support.

The list accordingly became the vehicle for the representative claims of a few. On the basis of the case evidence, it would appear to be unrealistic to expect all to be involved in governance equally - even at this small scale, and given the affordances of the particular online discussion tools. There are also people who either have the need to lead, or otherwise are simply willing to commit more of their energy. For such a community activist, the lists presented the ideal opportunity to "create" and maintain a form of constituency. In addition to lowering the cost of enlisting others, the online discussion afforded them the opportunity to remain in the public eye to a much greater extent than would have been possible otherwise.

It is not the intention of this research to evaluate representivity from a normative perspective - it may be an unavoidable mechanism where groups need some form of co-ordination, and action requires the impetus that is often provided by one motivated person. Arguably, the process of enlisting others in a particular point of view is accessible to a broader range of people and, as a result of the discussion list, the subsequent informal acts of representation are also more open to question. On numerous occasions participants on the list challenge the assumed authority of a representative. Leadership was questioned and publicly held to account more readily than for example at a residents meeting where the authority of the convenor was not so much open to question. There were also instances where community members became collectively involved in forming some sort of representation of community interests to external parties - local government for example.

Perhaps unusually, local government was neither present nor even directly implied in the online discussions of governance. In other words, rather than directly engaging formal government, the list was used to caucus, to rehearse arguments and test opinions that would be used to represent the community. This is as much a finding as a constraint of the evidence. I proposed in the Introduction that the contained scope of this local governance process affords a contained research context, introducing fewer unknown factors to the analysis. At the same time, a context where there is more significant interaction with entities external to the community may well influence how these interactions occur online. It is interesting - and perhaps an indication of the RRA's success at presenting themselves as community representatives through the list - that residents lobby them to intercede with government.

Conversation on the list may have given participants the impression of collective representation, however, the community often had to rely representatives to enact the desired outcomes of conversation. It is important to remain aware that, in spite of the closed scope of the discussion list, the community does not practically function as an island. The local governance process must engage a broader governance context, and the community are ultimately limited in their ability to act - both as a result of available resources, and limited administrative power. The risk then is that the online governance interaction becomes insular, an inward facing deliberation that does not acknowledge its limitations or the need for external help to ultimately enact decisions. I quoted Cohen's vision in the Introduction for a structure of governance that is as much sensitive to local needs as it fosters inter-local comparisons of solutions to combat the pitfalls of localism. I would argue that in addition to the risk of tunnel vision, the online discussion list is limited in its ability to empower local acts of governance to the extent that it insufficiently engages or involves outside parties in the process. In the case study, very little of the deliberative evidence was presented outside the list context, and so the community found themselves

reaching a potential solution that had built no inter-local support. It was a significant weakness of the community's online efforts that all the arguments on the list were eventually filtered through one or two representatives. Not only was a very thin version of the deliberative 'evidence' ultimately communicated externally, but the representation of a potentially pluralist argument was filtered through a representative who very likely held a biased view. Those in agreement found their argument communicated relatively coherently, while opposing arguments may simply have disappeared in a process that gave only the illusion of broader representation through the list. Given limited local governance powers, the risk is that the contingency of discussion on the lists too often relies on the few who carry the issue forward.

In an interesting example of this, the community had reached a form of agreement on a series of actions on the baboon issue. An informal management plan was drafted (and communicated on the list) which respected the views and values of as many residents as could be reconciled. Part of the plan involved attempting to herd baboons out of the village into a neighbouring wildlife reserve, their traditional habitat. A local team had communicated with authorities, and obtained all the relevant approvals and permits from conservation and animal welfare organisations. However, when the plan was put into action, there was public outcry from animal rights activists in the broader region. People who had not been part of the local online deliberation misunderstood the intentions, as well as mechanisms of the drive and misreported activities to the press. Within a day the act of local governance had turned into a public debacle, leaving authorities red faced and the local community threatened with a series of prosecutions should they continue their plans. The process of deliberation had to be started anew, in the broader context, where it had angrily started off locally nearly three years before.

6.4.4 Findings in the light of the fundamental principles of democracy

I conclude the discussion by reflecting on the research findings in light of two foundational principles proposed by theories of democracy. In the literature review I proposed that, informally, one might say democratic governance implements some variant of the democratic principle of “rule by the people”. Dahl (1991) proposes that this principle implicitly presents two fundamental values: intrinsic equality – that all are equally fit to contribute to decisions that affect the general welfare; and personal autonomy – that all have the right to be self determining, in other words to contribute to decisions that affect them to the maximum extent possible.

With regard to the first, the principle of equality, one might say that in balance, the local discussion list allows more people to participate in governance than would have been possible otherwise. It does not do this to the exclusion of other channels, but presents an alternative that further also integrates by bridging other channels of communication. The list afforded the opportunity for governance conversations to cover a broader range of issues, and gave audience to a wider spread of concerns than may have been possible in face-to-face meetings alone. I have also argued that it admitted, if not broader, at least a different range of expression or forms of communicative contribution, again particularly useful if seen in compliment to other channels rather than as an exclusive venue. The email-based discussion is arguably less intimidating than having to contribute at a formal meeting - there is no chairperson to address, and much less direct sense of personal exposure. The lower communicative bandwidth of email-based discussion has often been considered an advantage exactly because it fosters more egalitarian communication. That said, I have also discussed that interaction on the list was, in other respects, perhaps less egalitarian than might have been hoped. The list was initiated and actively moderated by members of the community who already had a strong hand in local affairs. Their style of

moderation – including interventions that were relatively invisible to participants - did not afford all equal voice. I discussed also that some participants used the medium more effectively than others - particularly those with stronger writing experience. There is the risk that the discussion list was used to give the impression of inclusive and equitable governance process, when in fact decisions were still often made in private, offline. In summary the list perhaps supported a process that operated at more than one level at any given time - it offered new opportunities for participation while at the same time potentially exposing participants to inequitable practices.

It is difficult to discuss equality without making reference to the second principle - that of individual autonomy. I earlier discussed that each person constructs an “imagined community”, from which in turn stems a personal vision for community: what its values should be, what relations are important, and how governance events should accordingly unfold. The case shows that some put a great deal of effort into making their vision a reality. For them the list became a valuable tool to enlist others in their project, to co-ordinate action, and to convince opponents of their values. In effect, it offered a great deal of additional scope for individuals to enhance their autonomy. In perhaps stronger terms, the list supported a series of “representative claims” (Saward, 2006) - if only to create a particular role for the claimant, rather than necessarily a position of leadership. At the same time, as I quoted Gutmann and Thompson (2004) in relation to deliberation, the list was also the community’s most likely source of defence against inequitable use of power. It afforded a space where the ideas of individuals - for better or worse - came into conflict with collective opinion, such as it existed. To be more accurate, the case evidence suggests a battle of autonomy or individual wills rather than the conflict of individuals with a cohesive collective. The resulting battle of wills was perhaps fiercer exactly because the list-based discourse was between relative equals, and because the style of communication afforded a greater degree of disruption.

To the extent that people chose to exercise their autonomy in the context of the group - in this case publicly on the list - it follows that there was a degree of risk associated.

Interview participants frequently commented on their hesitation to open a concern to discussion on the list, the risk of making themselves unpopular, or of having to defend their ideas against challenging responses. This tension between the will to act collectively, and the need to retain autonomy touches on a central theme in the discourse of democracy.

When Habermas (1997) writes of “[t]he dialectic between liberalism and radical democracy”, he summarises questions within the discourse of democracy which just as well reflect the tension implicit within community: “[t]he dispute has to do with how one can reconcile equality with liberty, unity with diversity, or the right of the majority with the right of the minority.” (p.44) The case evidence supports the proposal I made in the literature review - that this is not a conflict that one can realistically expect to permanently resolve, but rather that ideally results in continuous, hopefully fair negotiation. The challenge then is to devise mechanisms to reconcile plural individual wills to some form of constructive, collective action. While the laissez faire style of moderation employed on (and in fact afforded by) the list gives the appearance that this process had been left to “the force of better argument” online, I observed that, at some levels, the list was also potentially used to afford a handful people a relatively strong steer in the process of collective action. The absence of formal decision-making on the list may have been by design as much as the result of any inherent limitations of the online discussion - exactly because the online process risks that community leaders lose a degree of autonomy.

Whether the resulting collective action is undertaken fully transparently or not, the online governance conversations do have the potential to become a source of ideas, an aspect of the process of forming new versions of the truth. Gurstein (2010) refers to ‘community’ as a space to generate alternative social ‘facts’ to those offered for example by commercial

organisations, and so a significant source of autonomy. In relation to this I claimed that an important understanding of the notion of deliberation, is that it can be more than a mechanism for deciding between pre-determined outcomes. In the process of deliberation norms are shaped and social meaning “created”, new options and potential outcomes generated which may not have been acknowledged before. A sense of community not only motivates people to become involved in governance at a level where they have the greatest opportunity to have an impact, but it also creates a context for meaning making that is absent otherwise. The case evidence suggests that the discussion list played a very significant role when it made this context visible, giving it more concrete form. It is difficult to tell exactly how much of participants’ sense of community stemmed from the online discussion - but the case proposes the list had become a significant vehicle. Most community initiatives later communicated via the list - whether the volunteer fire service, a youth camp or newly formed pre-school. Participants discussed governance issues, but also shared images, told stories and exchanged jokes. The list represented perhaps the most inclusive and enduring shared conversation that residents had the opportunity to take part in, a conversation that played a significant role in giving participants the sense that they belong to a collective.

In the context of governance, the notion of autonomy relates strongly to what Anderson (2010) refers to as “political efficacy” - the belief that either individual or collective political participation can achieve desired outcomes. At the level of the individual, a sense of efficacy relies on the experience that one’s contributions have had an impact on the process of governance. In this sense, the dynamism of discussion on the community list afforded more direct feedback than conventional process. Participants had feedback on their contributions even where these did not result in direct change. Having said that, individuals however had limited power against the external forces that had the biggest influence over their lives. It can be a profoundly disempowering experience when one’s

autonomy ultimately translates to one relatively inconsequential vote against a looming threat. Here a sense of *collective* political efficacy becomes an important motivator to act - it offers a sense that one might retain a degree of autonomy to the extent that the political goal is shared. The degree to which the discussion list communicates collective successes affords members of the community the belief that they can have a significant impact on their world through the collective. The property development discussion is a case in point. A small group of activists initiated the action by reflecting on past collective success under similar circumstances, drawing past heroes into the discussion. Throughout the process both progress and setbacks were communicated online in a way that highlighted the potential efficacy of community action. This created the sense that the community shared a degree of autonomy. As a result, from a community comprising around 400 households, 98 individual letters of objection were submitted to the council. The apparent impact of this collective act (again communicated via the list) in turn motivates further initiatives, empowering a group of people to rally around the notion of their community - however vague the concept proves to be on closer scrutiny.

6.4.5 A brief return to the work of Habermas and Foucault

The discussion of collective action above would be a lot simpler were it not for issues of power. Even given relative individual equality and autonomy, in a process that ostensibly works toward a common good at the most local level, there are still questions about the use of power. The challenge is perhaps well reflected in the tension between the theories of Habermas and Foucault - two authors I have quoted frequently, and who in combination provide an axis of discourse that is useful to the discussion of the community list. As Flyvbjerg (2006) also makes the comparison in a recent review, the work of Habermas presents the ideal of the collective, Foucault in turn the reality of power. The perspective provided by Foucault is useful in exposing how power came to be, and as a result how it might be dismantled. Through his lens this discussion might have concentrated on potential

abuses of power - the way in which the moderators use the list to gain influence; to criticise the online deliberation as a process that gives the appearance of transparency, while too often failing in reality. Foucault would have been suspicious of processes where a group claim to be 'self policing' - imposing their idea of right and wrong on others through public sanction. I would argue perhaps rightly so - all these risks are apparent in the use of the discussion list. As adherents of Foucault's perspective claim - far from being inherently democratising, online tools also offer the perfect technology of control, a form of panopticon where power aggregates disproportionately through the very nature of the network.

However, Foucault's process of finding and cataloguing the abuse of power has very little to say about the positive use of power, much as it is acknowledged in principle. The case evidence proposes that there will be uneven distribution of power even in local groups - but from there sometimes stems also the strongest local governance initiative. I would argue that the discussion list was a public good which required a great deal of work to maintain. Relatively few people in the community were willing to take that role, to make the effort even to contribute to combative dialogue, let alone to attempt to facilitate the process. Some critics on the list were quick to point out abuses of power or lack of transparency, but few were willing to become involved to a greater degree themselves.

The risk then is to dismiss Habermas, as many do, as advocating a utopian ideal that does not match the reality of even local governance online. In the context of the case, Habermas' theory (Habermas, 1987) is perhaps less useful at offering a picture of what actually occurs on the list; but it does attempt to offer a vision beyond mutually instrumental dialogue. The research interviews substantiate that there was the will between community members to collaborate, the inclination towards acting collectively, or to belong to some version of the communitarian collective. Perhaps the biggest strength of the

community list was that it gave a sense of the collective, it created the space for individual imagined community to be expanded and to be tested against the ideas of others. Therein lay a profound source of initiative for the community, and a source of goodwill towards something approaching Habermas' communicative action. Individuals act less instrumentally when they have significant investment in the collective. In this regard, perhaps the biggest oversight of the list has been its weakness at giving participants a sense or view of the collective process itself. The list conveyed no sense that the intention of dialogue was to move beyond instrumental or object orientated discussion to something more closely approaching communicative action. My interviews with participants also elicited no clear sense of what might be a more appropriate arrangement for moderation - again Habermas' principles for communicative action would not be misplaced as an ideal or set of guidelines. As a result of the omission, the online dialogue was at times strained by the discourse of power - attempts to disrupt or to point out potential abuse without the understanding of a better alternative.

On the basis of Foucault's work, I would argue also that power operates at multiple levels - there are the internal struggles of one small community, and then the larger processes of governance which they are part of. The list operated as a supplementary communication channel to community meetings and informal conversations. On occasions this worked to cement the power of those already afforded the strongest steer in local governance, but at the same time it offered new opportunities to express power and so provided a degree of balance. In affording opportunities to rally the community - as observed particularly in cases that I claimed amounted to collusion - the list further developed in residents a sense of their own agency, while at the same time it provided the mechanism to collectively dismantle oppressive power. The irony here is perhaps that the 'insider' view propagated by the list is very Foucauldian, eager to point out abuses of power in the other while none the less engaging the external world instrumentally. A well-known risk with small

community initiatives such as this is that they lose touch with the larger governance reality. It is telling that none of the discussions on the list reached beyond the borders of the community to place its discourse within a broader context. I would argue this was a missed opportunity for a direct deliberative initiative. The solutions to many of the problems that residents faced lay at least partly in the larger governance space: in the case of the baboon debate there were the authorities, research and conservation bodies and other communities to engage; crime was a shared problem, and so was potentially destructive property development. As a result of its ad hoc, informal and inward facing nature the list had no broader recognition - even a poorly attended face-to-face meeting was considered a more legitimate deliberative space. The risk in this is that, with all its potential value, the list becomes a diversion of those with the energy to otherwise apply themselves to local problems.

7 Conclusions and further work

In this chapter I present conclusions to the research (Section 7.1), followed by a critical assessment of the work overall (Section 7.2). In Section 7.3 I then reflect on the contributions that this research makes to the academic and practitioners' discourse, as well as consider potential future work following from questions that were raised in the course of analysis.

7.1 Research Conclusions

Hauser (1998) frames the role of deliberation in governance thus: "Democratic governance rests on the capacity of, and opportunity for citizens to engage in enlightened debate. Although deciding public policy through argument has little to recommend it in terms of efficiency, the purpose of deliberation...is not efficient government but educated judgement." (p.83) The outcomes presented in this case study suggest that in the hyperlocal context of a geographically co-located community, online deliberation may partially fulfil this function – though residents arguably made 'educated judgement' in a broader sense than the policy debate that frames Hauser's claim. The lists had become a significant venue for citizens to develop educated judgements about the plural process of engagement itself, and for them to directly participate in or co-ordinate the acts that construct governance in their local environment. As intended, the community discussion lists had become an instrumental tool to support a direct approach to democratic governance. In addition to the instrumental matters of day-to-day organisation, it appears there was significant enduring value in the expressive aspects of residents' online communication.

Though the investigation does not show evidence of overt decision taking on the lists, the online conversations significantly inform the process of making decisions and also support direct governance action. It appears that the online discussions rarely "created" consensus,

but were effective in supporting action where some level of implicit consensus existed - as I observed in the 'feedback exchange', 'stakeholder coordination' and 'deliberative mediation' conversation patterns. Furthermore, online deliberation appeared to be particularly suited to manage the sometimes unavoidable pluralism (Cohen & Sabel, 1997) that complex issues introduce to local governance. The case analysis supported not only the view that expressive communication online creates mutual respect (Gutmann & Thompson, 2004), but that it potentially allows participants to identify shared interests with respect to an issue, which makes a mutually acceptable management solution possible. In the context of local governance, the asynchronous and responsive nature of the email based lists seemed particularly suited to supporting such an ad hoc, pluralist engagement process. It may however also be that, without appropriate moderation, these attributes are ill suited to forming consensus and subsequently taking collective decisions, as the deliberative process is too easily disrupted.

More than a series of discrete deliberative events, conversations on the community discussion lists appear to have constituted an emergent, evolving facet of the local public sphere (Habermas, Lennox, & Lennox, 1974) where online interaction routinely crossed boundaries with (and potentially amplified) the offline in an informal manner, constituting what Hauser (1998) refers to as "vernacular rhetoric." In addition to the lists constituting an episodic information sharing and decision making mechanism, the instrumental aspects of conversations developed shared understanding - or at the least shared experience. From this emerged the future potential for action to the extent that participants developed a sense of collective or individual efficacy (Bandura, 1999; Kavanaugh, Kim, Pérez-Quñones, & Isenhour, 2007). In the process, residents participated in an expressive negotiation of values and liberties, a more interactive construction of each individual's "imagined community" (Anderson, 1991) than might have happened otherwise.

I proposed in the Introduction (Chapter 1) that an instrumental view of deliberation predisposes to an instrumental view of related technology - as a 'tool' primarily to reduce the coordinative overheads associated with direct deliberative decision making.

Recognising the value of expressive contributions instead encourages the researcher to consider the extent to which an online list, as a socio technical system, fulfils a broader social function to create a new space where meanings and values can be contested. These theoretical positions are not exclusive, nor without precedent in the literature. The objective of this research - to focus on their role in governance at the level of community or neighbourhood - grounds the discourse in the practicalities of direct resident involvement at a scale that arguably has significantly different dynamics than that of even a regional policy debate. The details observed of these interactions suggest both opportunities and constraints for the relationship of technology with direct local democracy.

The combination of hyperlocal context and lowered co-ordination cost afforded by the community discussion lists significantly mitigated the challenges of direct deliberative democracy (DDD) that I presented in Section 2.2.3. Residents understood local issues well, and were further afforded the opportunity to become informed on even complex governance matters through resident experts' contributions on the lists. Participants communicated informally on the lists, and the broad range of communicative interactions that I observed illustrates how perhaps the hyperlocal online discussions were less 'exclusive' than might be expected of formal public debate held at larger scale. The research however also raises issues that need to be addressed if local online governance is to overcome further challenges of DDD. Regarding the criticism that DDD presents a demanding conception of citizen involvement – I found that sustaining deliberation on the lists clearly demanded work of moderators, community leaders and residents. Rather than the technology lowering search and negotiation costs across the board, the increased

volume of information required more effort to digest. Furthermore, regular exposure to the expressive communication of others, combined with relatively easy access to the deliberative venue, fuelled more 'talk' than would have been engaged in otherwise. While moderators might have reduced the search and negotiation costs to participants by filtering conversations one way or another, the outcomes of analysis indicate that the community as a whole gained significantly exactly from the broad range of discussion and even sometimes unwelcome emotional interruptions of the governance process.

Regarding the role of power in deliberation, the results highlight how issues of power feature at multiple levels in the hyperlocal discourse. Individuals and the community as a collective were potentially empowered by the lists, while at the same time community leaders may have usurped online dialogue exactly by the affordances of the chosen technology. Normative evaluation is complicated by the fact that community leaders were volunteers, tasked with a demanding public service that they had to conduct with limited resources, energy and time. It is perhaps not surprising that the residents' association chose to keep contentious aspects of the decision making process offline, within face-to-face committee meetings. On the community discussion lists the cost associated with interrupting or derailing the governance process was disproportionately low for protagonists, who themselves had little intention to become directly involved in finding or enacting alternative solutions.

The email based discussion further appeared to threaten the open or 'laissez faire' approach to governance that made the lists possible in the first place. There is evidence that online discussion escalated rather than resolved disagreements between residents. On occasion this resulted in individuals seeking protection in official structures of governance (such as the local municipality or judicial system) because they perceived a degree of mob justice in the online collective process. Further, while the lists may have been empowering

of the community by strengthening collective political efficacy, this sense of empowerment was at times belied by the mechanisms through which power was ultimately exercised. It is both a strength and weakness of the choices made in implementing the email list that this community discussion remained 'closed' and did not engage the broader governance environment. While there were many advantages, it did mean that, beyond the borders of the case community, rich and impassioned deliberative arguments were filtered through representative mechanisms, potentially diluting both their impact and the extent to which proponents have agency in the governance process.

In conclusion, I propose on the basis of the research that while hyperlocal online deliberation supported a more direct governance process in a number of ways, the process was not free of the challenges associated with representivity in other local governance contexts. The discussion lists supported a broad range of deliberative acts, though overall residents' deliberation was nearer Hauser's "vernacular rhetoric" (Hauser, 1998) than the ideal rational deliberation proposed by Habermas (1987). I reported that in many cases residents deliberately subverted what they perceived as the 'controlling logic' of instrumental rationality. While community dialogue is often idealised, and online technology seen as a mechanism to render local communication both more inclusive and more equal, the hyperlocal governance process observed in the case study was imperfect in many respects. Residents' online deliberation was not fully inclusive, nor perfectly equal, and issues associated with the inequitable use of power remained. One might however argue that, while my analysis and discussion focussed on the community lists in relative isolation, the local governance process was more inclusive and more equal overall as a result of new opportunities and reduced transaction costs afforded by online interaction. Significant progress had been made toward hyperlocal Direct, Deliberative and Democratic governance by means that seem no more imperfect than any of the alternatives that existed.

The most significant challenges highlighted by this study are not related to the technology itself, but in the socio-technical domain. To improve the implementation of hyperlocal online deliberation requires a keen awareness of the complex shaping role that even apparently unsophisticated technology might play in the hyperlocal context. The hyperlocal context, in turn, presents a distinctive set of challenges and opportunities for researchers and practitioners in the field of online deliberation.

7.2 Critical assessment

I considered the strengths and weaknesses of the methods I use in Chapter 3, and reflected again on these where I report on detail of each stage of work in Chapter 5. In Section 6.2 I further reviewed some of the limitations of the evidence to the extent that it informs the subsequent interpretation of results. For this final critical assessment of the study, I return to the research objective and also epistemological concerns raised in Chapters 1 and 3. At the outset I stated that the overall objective of this research was to better understand the role of online communication tools in hyperlocal governance, particularly focusing on resident-to-resident interaction. Accordingly, the overall research design was motivated by the relatively unexplored territory of hyperlocal online deliberation: the main research tasks were to explore and identify phenomena that would allow me to test linkages to theory developed in other domains, or at different levels or scales of governance interaction.



Figure 5 - An example of local government and direct democracy. A town meeting in early New England. (Formann, 1908, p.94)

During the research planning an image (Figure 5) served as useful metaphor for the approach I was to follow: The sketch illustrates a ‘direct’ governance meeting at the turn of last century in New England. From the socio-technical perspective one might consider the room, table and chairs ‘technologies’, as tools embedded within, and in turn impacting layers of social relations and context. In some research approaches, the technology itself is all but ignored, invisible to methods that focus purely on social relations. Conversely, in the “traditional approach” (Kling, 2003) to technology, the impacts of technology are studied as if the participants were puppets under the influence of technological affordances. To continue the metaphor - I was interested to investigate the extent to which technology is implemented (in this case e.g. how the room is arranged) to support the existing social order. In turn, a simple change or rearrangement of technology might dramatically influence what expressions of the social are afforded - whether fully intentionally or not.

To this end, the case study approach afforded a detailed view of the role of technology in context, over three years of first hand observation. From this close association emerged insights about the ways in which the technology is practically used, and a clearer understanding of the practices and roles associated. I also gained insight into the underlying pragmatics that are often invisible to studies that draw on a broad but relatively shallow range of observations. As a result of the interpretive depth afforded by the approach, I was able to explore the ways in which technology is both an influence upon and influenced by the social setting - much as the moderators and participants themselves might have considered the technology as a-political and unobtrusive as a piece of furniture. The mechanism of transaction costs (Cordella, 2006) proved useful to understand how technology potentially impacts social interactions, taking into account that actors are aware of at least some of the costs and opportunities afforded by the particular technology and so able to make rational choices (Markus, 1994) about their engagement with it. An approach rooted in behavioural economics proposes that actors will attempt to reach personal and collective goals, or at least the best possible outcomes, at the lowest cost and will look to technology to help achieve this. While I have found that the actuality of both individual action, and the local social context within which actions are embedded, is more complex than such economic models imply, I also found that having a sense of the relevant components of transaction cost (and also opportunity) in any specific context helped understanding of why participants chose to use the technology as they did.

The risk in taking a relatively fine grained view of the socio-technical system is that meaning becomes obfuscated in a mass of details to the extent that few clear responses remain possible to the original lines of enquiry. The research design mitigated this, in part through the use of well-articulated theoretical frameworks, and by taking a structured approach to interpretive analysis. The structured case research framework (Carroll &

Swatman, 2000) was particularly helpful as it encouraged the process of analysis to move back to theory building after each detailed round of observation. It was none the less a challenge to combine an interpretive, constructivist approach with methods of content analysis that perhaps have a stronger background in quantitative research. Moving between the two modes of understanding leaves the risk that particularly statistical methods lose their power, and lend only thin positivist credibility to research that is none the less thoroughly interpretive. The ‘patterns of conversation’ that I identify in Section 5.2.2 are intended as a descriptive device, but presented as the relationship of content codes might appear to take a quantitative approach, implying statistical correlation. The direct use of the content analysis codes, for example in Figure 5 (types of contribution over time), were further useful to describe interaction, but also risk the same misunderstanding. While I had drawn on the methods of discourse analysis and the triad card sort to elicit evidence in a structured manner, they further introduced relatively complex mechanisms to elicit data given that I chose not to fully employ their quantitative aspect.

Both methods nevertheless proved successful given clear framing in advance, and care in their application. As an example of the descriptive power of the coding process employed in discourse analysis, the scattering of ‘types’ of conversation in Figure 5 suggests that, in this context, a study using ‘time slices’ such as the Networked Neighborhoods study (Flouch & Harris, 2010) is potentially flawed. A short ‘time slice’ might study conversation in one mode or another and miss the true range of interaction. The card sort technique also proved to be a good elicitation device as the triad sorts evoked direct interpretation of content by research participants, rather than my questions prompting their response. The methods further allowed triangulation of the content analysis (of the message archive) with the personal constructs and direct observations of participants. On balance, the methods provided sufficient depth and breadth of material, and made it possible to leave an audit trail of the inferences and interpretations I made.

My position as participant observer facilitated the long term, in depth case study approach I was able to take. While I have discussed the potential for (and mitigation of) personal bias in Section 3.3, there was the further risk that I might not see the wood for the trees. In other words, that I was necessarily limited to an insider's view of the problem domain and so lacked a degree of interpretive perspective. Accordingly, involving external participants during the card sort exercise not only served the research design process, but also provided useful triangulation of my perspective on the case study. While I do not make detailed comparison between the views of community members and external participants (I outline reasons in Section 5.3.4), the constructs recorded in tables 3, 4, 5 and 6 propose that external participants most prominently approached the material at a different level of engagement than the 'insiders.' External participants were focussed on matters of process, rather than the politics, contingency and contextual details of interaction. That said, there were no issues that the outsiders pointed out that had been entirely missing from my perspective or framing of the problem. Overall, their contributions supported the analysis I had done. There was however a difference in emphasis, and particularly useful, they expressed known conversational dynamics in new ways. An external participant for example proposed that a message might build or conversely leverage community resources. Another pointed out the difference in problem solving style of participants – collective versus individual. A third made the distinction between messages that address the group versus those that address the 'leader.' Each of these contributions prompted me to revisit how I had conceptualised conversation patterns, and the residents' online communication in general. The external input was accordingly valuable overall, serving multiple purposes. In hindsight I might have made more frequent opportunity to involve external participants explicitly - given the opportunity and resources to do so.

To return to the metaphor in Figure 5, as result of the chosen research approach I was able to make a detailed description and also elicit a clearer understanding of the dynamics of socio-technical interaction within the ‘room’. The research does so in a way that allows the reader to take from the results what potentially applies to another instance, raising both concerns with and opportunities for future implementation of the technology.

7.3 Final reflection on research outcomes in the light of literature.

In this section – effectively the final stage of the structured case research cycle - I consider the contributions that the research makes to both academic and practitioners discourse, paying particular attention to further questions that arise from the exploratory nature of this study. In doing so, I include reference to selected literature that post-dates the completion of the empirical work undertaken for this study.

7.3.1 The discourse of Online Deliberation

I situated the study within the discourse of Online Deliberation, much as the outcomes are also relevant to a number of other subject areas, for example to Community Informatics (Gurstein, 2010). In Section 1.1, I discussed that studies of online deliberation most often investigate deliberative processes at relatively large scale, and focus on the discourse between citizens and formal government (Wright, 2012). This emphasis persists in much of the more recent literature of the field. While the role of local deliberation is acknowledged in Davies’ (2009) introduction to a compilation of thirty articles, most of the contributions subsequently follow the characterisation that I make above. This does not imply my study of hyperlocal resident-to-resident interaction is outside of this discourse. Some of the authors deal with broadly ‘local’ deliberation, much as they focus on the dialogue between government and citizens (Price, 2009; Ohlin, 2009; Trenel, 2009), or within civil society organisations (Ahuja, Perez-Quinones & Kavanaugh, 2009). Articles dealing with the implementation and design of deliberative environments (Davies, 2009;

Schuler, 2009; Wright, 2009) - though grounded largely in experimental settings - are also strongly relevant to my findings 'in the wild'. More recently, in a special edition of the 'Journal of Information Technology & Politics' focussing on Online Deliberation (JITP, 9(1), 2011 – see citations to specific articles), several authors investigate comparable (though similarly characterised) processes of deliberation at regional or national scale (Karlsson, 2011; Stromer Galley, Webb & Muhlberger, 2011; Thakur, 2011). The purpose of this section is to consider how key aspects of my study are in dialogue with these authors, as well as others in the field.

One of the core assertions of this study is that the hyperlocal context, and resident-to-resident interaction that this affords, has a distinctive character, presenting a unique set of challenges and opportunities for the implementation of technology to support the deliberative process. To this extent, the work might be considered one response to Coleman and Moss' (2012) challenge - that the field of Online Deliberation must extend its investigation beyond formal deliberative practice: *"As well as endeavouring to acknowledge and encourage voices that are too often unheard in formal deliberative situations, there may be much to be learned by researchers from seeking out spaces of unconventional political talk. In diverse modes and arenas of informal online communication, people exchange opinions, stories, jokes, gossip, and desires, and these can sometimes assume a deliberative character, because attempts by people to persuade one another of the rightness of their preferences and values goes on all the time, interspersed among much else that is casual and mundane"* (p.12).

This study has highlighted how, much as the online public sphere might otherwise overcome issues of distance and scale, the geographically local context of resident-to-resident deliberation is shaped by particular dynamics and concerns exactly because conversations remain bound to place. Beyond its spatial interpretation, the hyperlocal

context not only affords access to shared history or pragmatics, but also introduces a high likelihood of future encounters, shaping the tone, but also the potential goals of the deliberative process. This is in contrast to Wilhelm's (1998) characterisation of political deliberation in usenet groups, that are "home to an array of overlapping, short-lived conversations...[where] sustained deliberation is rare..." (p.314). More recently, authors report more optimistically on similar public discussion spaces (Graham, 2011; Karlsson, 2011; Thakur, 2011), if with less critical expectations of what the engagement should entail. One nonetheless gets the sense that spatially disembedded fora are evaluated in terms of individual engagement and opinion formation as an end in its own right.

The level of engagement that I observed at the hyperlocal level is nearer to that reported by Flouch and Harris (2010) in their Networked Neighbourhoods study. Similar to what they observe, participation is informed by long(er) term association, direct engagement and a strong sense of purpose about local issues in an "agitated, involved democracy of everyday life" (p.25). Particularly relevant to the hyperlocal context is the ability of a community or neighbourhood to self organise, to negotiate a dynamic and pluralist understanding of their governance reality, as well as to develop the efficacy to communicate this externally where required. This diverges from the conventional understanding of e-participation, both in terms of where the process initiative is placed, and what sort of process is potentially supported in the first place. It also challenges assumptions of online deliberation as mainly policy debate between citizens and government, or of petitioning government locally.

These findings have bearing on the framing assumptions that inform the study of online deliberation - in particular in the local context. In an early overview of the field, Dahlberg (2004) proposes deliberation should be evaluated against "criteria drawn from Habermas' theory of communicative rationality" (p39). Framing work by Graham and Witschge (2003), as well as Stromer Galley (2007), also holds deliberation to traditional standards of

‘rational critical debate’, with strong emphasis on the quality of rational deliberation. More recently Graham (2011) however proposes moving away from such idealised forms of deliberation: *“Privileging rationality via argumentation as the only relevant communicative form ignores the realities of everyday political conversation. In particular, it ignores its expressive nature... expressives are inherent to political talk, and it would be hard to imagine people actively engaging in such talk if their emotions were not there to provoke them to do so”* (p.34). The move beyond pure rational dialogue is also supported by Coleman and Moss (2012) as follows from the text quoted earlier.

My own findings in Section 5.2 strongly support the role not only of expressive dialogue, but of what Hauser (1998) would refer to as ‘vernacular rhetoric’ in governance. This does not imply that deliberation cannot be held to standards, or that deliberation must necessarily be everyday talk, but perhaps that different contexts imply different approaches. It also proposes that the notion of what constitutes useful or desirable communication might be expanded in a broader vision of what constitutes the deliberative public sphere. In my own framing of deliberation I steered away from procedural rules of deliberation to more substantive concerns presented by the foundational principles of democracy (intrinsic equality and personal autonomy; Dahl, 1991) - without implying these can only be reached through the ivory tower of rational debate.

The discussion has broader implications than the academic field of Online Deliberation itself. Coleman and Moss (2012) propose that *“deliberative citizenship is best thought of as a construction, rather than something naturally occurring and given, and that the modest field of online deliberation has contributed to its contemporary enactment”* (p.2). Should the deliberative citizen mainly contest policy through Habermas’ “force of the better argument” (Klein & Huynh, 2004, p.197) - or do people have the need to be more directly involved in the enactment of the decisions that affect the world they live in? Without

diminishing the role of policy debate and of citizens engaging government at higher level, my research would imply that there is significant scope for a very direct form of online deliberative engagement in the hyperlocal context. Certainly, participants to the local discussion list seemed well inclined to deliberate the issues that most directly affected their lives.

At a more practical level, the field of Online Deliberation is substantially constituted of practitioners, designers and tool builders (Davies, 2009) who have influence on the expectations for, as well as affordances designed into deliberative tools or environments. Without necessarily adopting technological determinism, Wright and Street (2007) propose that design can play a significant role in deliberative engagement and outcomes. From this perspective follows attempts such as those by De Cindio and Peraboni (2010), Davies et al. (2009), Schuler (2009) and Ahuja et al. (2009) to design better deliberative environments, often focussing on specific aspects of the deliberative process to encourage or improve upon. From work such as this Towne (2011) offers a collection of best practices for the design and implementation of deliberative systems. It is perhaps unavoidable that no one system can implement all the recommendations of such a collection - in fact, it may not be desirable. From a technical perspective, it is interesting that the case community had implemented almost none of the guidelines proposed by Towne and yet appears to have been judged successful by users. In the context of civic deliberation, De Cindo and Marco (2007) refer to email lists as “old fashioned” (p.109) - yet the email lists employed by the case community sustained a broad range of interactions that were substantive to local governance. Ristroph (2009) similarly reports on the sustained and successful use of email lists by the developers of the Debian operating system - “among the most technically literate people in the world” (Davies, 2009, p.14) - to conduct the governance of their community. There is much to be said for the flexibility of asynchronous discussion via

email lists, perhaps exactly because the technology itself imposes relatively little structure on interactions.

One might nonetheless consider how the community may have benefitted from more conscious design of the deliberative environment offered to them. Related to my characterisation of the “deliberative engagement” pattern of conversation, De Cindio and Peraboni (2010) report that deliberation in public deliberative spaces often become “a never-ending public civic dialogue which does not finalize to tangible decisions...” (p.9). This frustrates participants, and in the context of citizens engaging government, this has the weakness that deliberation has little direct impact. While they acknowledge the role of facilitation, the authors approach this as a design problem. Space is needed for free discussion, but themes from the “community space” (p.9) must then be moved to a more structured environment, the “deliberative space,” where there are stronger procedural rules, reference documents can be uploaded to support arguments, and ultimately citizens’ preferences can be expressed through polls or vote. Rather than deliberation flowing freely between online and offline as I observed, all deliberation accordingly happens online in a bespoke environment that requires investment of participants get to know and inhabit. This class of solution is perhaps unavoidable at larger scale, where participants share less interaction otherwise and the online space might be formally supplemented with offline events, but it has clear disadvantages in the hyperlocal context as I have observed.

The field of ‘Argumentation Support’ concerns itself specifically with improving the ability of people to move arguments forward logically through better tools. Macintosh, Gordon and Renton (2009) propose, from a perspective grounded in the theory of argumentation, that “it is not obvious that many people actually have the necessary critical thinking skills to deliberate on issues” (p.43). Without restating my earlier arguments about different modes of interaction, or in fact contradicting the clearly framed argument that the

authors make, I would propose that there is more to local online deliberation than pure and explicit deliberative argument (Coleman & Moss, 2012). Where there is the likelihood of long-term engagement, the relationships (and shared experience) that are developed may be as significant to governance as the outcomes of any single discussion. Further, given the role of conversational pragmatics, it is not only the gist of an argument that matters. It matters who said what to whom, when, and in response to what - both meaning and the potential for impact are highly contextual. Buckingham Shum and Okada (2008) take a somewhat different approach to argumentation support, focussing less on the procedural aspects of deliberation than to offer participants “sensemaking” (p.2) tools - the means to digest and visually map complex arguments. Their approach embraces uncertainty, that ‘truth’ is socially constructed and meaning contextual: “Sensemaking is about accounts that are socially acceptable and credible” (p.2). Participants to my study certainly expressed a strong need to reduce the complexity or “noise” of deliberation on the list. In the discussion archive, I observed a few inexperienced attempts at consolidating argument or summarising points made - though these were mostly unsuccessful at moving discussion toward a decision. No sooner was a summary made, than proponents of either side set out again to clarify and amplify the core ideas attributed to their position. Would a tool such as Cohere (Buckingham Shum & Okada, 2008) have been practical to deploy, given the implied need for an impartial ‘knowledge cartographer?’ It would be an interesting research problem to see how this challenge might be solved ‘in the wild’ - potentially through existing technology such as an email discussion list.

7.3.2 The discourse of Direct Deliberative Democracy

The following discussion reflects more broadly on the theoretical frame I set in Chapter 2, though points inevitably overlap with the discussion above relating to the more specific discourse of Online Deliberation. In particular, I singled out four challenges that are often

cited of direct deliberative democracy. How do my findings reflect on the role of local online deliberation in mitigating (or exacerbating) these?

The outcomes of my analysis support the claim that some of the challenges of direct deliberative democracy are mitigated by the local context as I discussed in Section 6.4.1 - and that technology contributes to this by lowering especially the cost of co-ordination and instrumental forms of interaction. Participants were motivated to contribute, generally knowledgeable, and where the majority lacked technical know-how, local experts could share their expertise easily using the list. This contrasts with findings by De Cindio and Peraboni (2010), and Stromer Galley et al. (2011) who report on the difficulty of engaging citizens in top down initiatives lead by government. However, with the advantages of the local context, there were also new challenges, and from these follow questions for further research work. One readily anticipated challenge was the perceived 'signal-to-noise' ratio of the lists, with participants especially critical of extensive expressive interaction. Residents and moderators alike were eager to be able to filter messages, for example to split the discussions into more fine-grained topical lists. However, it also follows from the research outcomes that the value of this public good is in many ways proportionate to its cost to participants. A discussion that lowered transaction cost by reducing either speaking turns, or the audience for any given topic, had less value to the community overall.

It would be valuable to develop an expanded model of the various aspects of transaction cost in this context - and how these might be mitigated while maintaining the communal benefits. The TCT framework proposed by Cordella (2006) proved useful as a sensitising device for the purpose of this study, but could be refined or extended to fit the problem domain of online deliberation. Particularly interesting to case study or interpretive work, an expanded model might also take in aspects of opportunity, or the positive motivation of participants, which is not articulated in TCT. In other words, rather than purely focussing

on cost, the model might support understanding, in the context of online deliberation, how people trade-off motivation, opportunity and cost when making decisions. The work I have done in this study provides an indication of both costs and opportunities that might be considered relevant at the hyperlocal level, as well as how these practically impact governance deliberation given the choices users are able to make as a result. The outcomes of an expanded model of the “matrix of opportunity and cost” (Bimber, 2003, p. 231) would be valuable both as analytical tool and in the implementation of deliberative systems by practitioners.

In Section 6.4 I discussed some of the challenges related to the role of power in local online deliberation. Both individuals and groups might abuse power, and localism risks an insular local approach to governance (Cashin, 1999; Cohen & Sabel, 1997; Stoker, 2004) that is compounded where there are potentially fewer external controls in a system that operates near independently. The absence of formal constitution or impartial oversight can result in minorities being subjected to the equivalent of mob justice under the guise of collective local governance. While public online deliberation, such as the community lists afforded, might expose the process of marginalisation, it also magnifies the imbalance of power by making it easier for the majority to participate. The solution to this likely relates not to the design of technology, but lies in moderation or facilitation practices (Wright, 2007). However, this study shows that moderation itself can be a sensitive process - not in the least because the list moderators and community leaders may be closely associated. It presents an interesting research challenge to consider the combination of technical affordance and social practice that might improve the equitability and transparency of moderation - in an environment that is politically charged, and where by definition the moderators are part of the context, not outsiders who can approach the deliberation impartially. The small scale of deliberation and local context are very likely to present

entirely different design challenges (and opportunities) than have previously been considered at larger scale.

I reported on the reluctance of most participants to engage in (or to be exposed to) expressive conflict, particularly where the effects are ‘close to home’. There was a strongly expressed normative position that people should be able to “get along” and live in harmony - anything other was the result of selfish or narrow-minded ‘others’. Moderators of the discussion lists also worked to reduce or defuse strong conflict, fearing that residents would unsubscribe from the lists in response (as had happened on a number of occasions). For this reason particularly antagonistic topics of discussion were moved to new lists where heated exchanges presented less risk of losing subscribers to the main residents list. Dahlberg (2007) however proposes that conflict should be regarded as healthy - an integral part of the public sphere. His “agonistic” understanding of deliberation “sees cyberspace as a space of struggle, supporting both the reproduction of dominant social relations and their contestation by excluded groups” (p.48). While the communities’ online deliberation space was subject to internal issues of power, it should also be considered that it conversely represents multiple “counter publics” (p.48) in the broader governance reality of the case community. Not only did the online discussions engage participants who were not represented in the governance process otherwise, but the discussion lists became an important tool for the community to oppose external forces - a site of resistance as Gurstein (2007) proposes of the community itself.

I discussed earlier in this section my own observations of expressive contributions - in addition to their interpretation in relation to conflict - and how these align with existing work in the field of Online Deliberation (Coleman, 2011; Graham, 2011). To re-iterate the central point: Rather than purely supporting instrumental dialogue, local online deliberation can play a strong role in residents’ construction of normative positions, in their

developing a shared understanding of governance issues and so deciding what is “on the table” (Lukes, 1974) to act upon in the first place. The value of expressive dialogue relates closely to the notion of democracy as generative process, the “freedom to” rather than purely “freedom from”. Direct deliberative democracy demands that participants are offered more than simply options to vote on, but that they are more comprehensively empowered to be part of the governance process. While a substantial body of literature deals with empowerment, or the contingency of participation, it would be interesting to develop a stronger sense of the way that this relates specifically to hyperlocal online deliberation. In the research case the community lists played a significant role to give both individuals, and the community as a collective, a sense of political efficacy - by communicating past success and allowing participants to provide mutual support. I discussed some aspects of the process, but in this exploratory study could only broadly investigate the mechanisms and effects of it. To focus specifically on empowerment or the sense of political efficacy - in particular to understand how a sense of efficacy is developed through online interaction, and how this relates to ultimate governance outcomes - would be valuable to practitioners designing either tools or facilitation protocols.

A significant detail emerging from the study was also the absence of explicit decision taking on the community lists. This appeared to be at least partly a deliberate omission by moderators, who steered the process of online communication in a manner that did not lead to binding conclusions. Collective decision taking was also made harder by the roundabout nature of dialogue online, where there was no limit to the time allocated to an issue, and the affordances of the email lists made it possible for the governance process to be continually disrupted. I made the case that it is an advantage of online deliberation that pluralism can be maintained over time without forcing sub-optimal decisions for the sake of contingency - and that collective good none the less comes from the open-ended process. This does however limit the scope and potential contribution of online

deliberation. Kling et al. (2003) make a case against determinist forms of media richness theory, however, even the rational actor perspective proposed by Markus (1994) accords some degree of social shaping to the affordances of technology. The affordances (or ‘anti-affordances’) of email based communication contributed in part to the inconclusive nature of deliberation in the case context. I observed for example that on the lists there was less sense of ‘where the room was at’. While rational actors may exploit this to interrupt process, or to give a greater sense of consensus than truly exists, one might ask how better clues could be provided to participants, or how the process might be made more transparent. Would it be wise - given what the case evidence proposes of advantages of an open process at hyperlocal level - to impose stricter structure on online debate through either technological affordances or moderation practice as I discussed earlier in this section? It would very likely lead to clearer outcomes, but perhaps in a manner that gives the appearance of due process only, and that reduces the value of the online deliberation to residents in other respects.

7.3.3 Methodological contributions

While above I focused on theoretical and technical contributions of the study, aspects of the methodological approach also contribute to the practice of researching online deliberation.

From a methodological perspective the study is partly distinguished by the in-depth, interpretative approach I was able to take - it represents the hyperlocal studied from a hyperlocal perspective afforded by six years of first hand engagement within a community. I earlier cited Flyvbjerg (2006) that it is a misconception that “[g]eneral, theoretical (context-independent) knowledge is more valuable than concrete, practical (context-dependent) knowledge” (p. 421). The exploration was accordingly not expected to find under the surface incongruities of local online deliberation anything like a ‘social

clockwork.’ Instead it sought to elicit useful, or phronetic (Flyvbjerg, 2006) knowledge exactly from the “ambivalence and uncertainty” of social life (Bauman & Tester, 2001).

Comparable studies in the field of Online Deliberation more commonly study large samples using statistical content analysis. For example, Stromer Galley (2007), Graham and Witschge (2003) and Wilhelm (1998) derive content categories ‘top down’ from the principles of ideal deliberation. In other words - they study the extent to which certain features arise in online deliberation. Stromer Galley (2007) accordingly sets out to derive a coding scheme that could be used by other researchers, while earlier work by Dahlberg (2003) similarly seeks to standardise on approach to improve the cross case comparison of studies. While I also make use of content analysis, the categories I use are not (primarily) derived top down, though the Structured Case research framework that I employ acknowledges inevitable theoretical influence. Furthermore, rather than framing hypotheses in advance of analysing content, this study has been exploratory - to understand key dynamics in hyperlocal online deliberation rather than test the extent to which it conforms to specific criteria. The outcomes are accordingly less able to evaluate local deliberation ‘objectively’ against pre-defined ideals of rational argument, than to point out interesting features and potentially find unexpected value. Wright (2012) argues “there is a danger that we use idealized, and arguably impossible criteria by which to measure deliberation that preclude a positive outcome at the outset” (p.249). He also proposes that researchers accordingly miss significant features of online deliberation as it does practically occur. This research might be considered an attempt at putting such a perspective into practice.

Finally, I briefly focus on a further detail of implementation. The triadic card sort that I implemented in combination with discourse analysis provided valuable additional data and represents an unusual implementation of the technique. Because ‘cards’ were theoretically

sampled on the basis of discourse analysis, the 'personal constructs' of participants could be triangulated with the interpretations I made as primary researcher. The constructs that the sort elicited were also valuable in their own right, and might have been supplemented with a technique such as laddering were this required. I am however most excited by the use of the card sort as an elicitation device. The conversations that were prompted by the card sort provided rich interpretive data with only gentle direction to participants to reflect critically on message content. As an elicitation device it had advantages over the more traditional question-answer format of interview in that participants discussed matters at hand of concrete examples - each a verbatim transcript of earlier discussion. Very often discussion would then move from past discussions to events in the present, giving an account of the progression of governance issues, as well as the impact of the community lists over time.

8. Bibliography

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Appendix 1 – Samples of the card sort methodology

1.1 Card sort briefing form

Information Sheet for Participants

Purpose of this research

My research at the Open University in the UK aims to better understand how people use online media in their local communities. My specific focus is on how online media help or hinder people to engage with other members of the community in shaping community views or decisions. I hope to be able to arrive at conclusions that can improve the design of communication technology that supports community organisation.

Why you have been invited to participate

You are a member of the [name removed] SRRA, wetland or baboon forums and have read and contributed to the forums in the (recent) past. When you have read the section below on what is involved in participation, I hope you will be willing to help in my research.

If you do agree, I will ask you to sign a short form to that effect.

What does taking part involve?

If you decide to participate, I will need about an hour or so of your time.

In that time, I will ask you to read a series of postings to the community forum, many of which, if not all, you will have seen already. I will then ask some questions about them and ask you to try sort and arrange them in ways that make distinctions between them.

As you do this, we will talk about what you are doing and the choices you are making. To help me record this accurately, I will make occasional notes backed up by an audio recording.

At the end of the session I will review with you the records I have made so that you can make any corrections or adjustments you wish.

The session would normally be conducted at your home, assuming this is what would be most comfortable and convenient for you. If you would however prefer that it occurs elsewhere, there are a number of potential locations you can choose from.

Your privacy and confidentiality

The data I obtain will be stored securely in an anonymous form so that your privacy and confidentiality are assured.

You have the right to see that data at any time, simply by asking me. You can ask me to revise the results recorded. If you wish, you can tell me that you would prefer to withdraw from the project. In that case, I will destroy all data I have obtained from you.

In any case, within one year of my having completed my research, I will securely destroy the audio data and your personal details.

What will happen to the results of the research study?

The results will appear in my PhD thesis when I complete my studies at the Open University.

The results may also be presented to other academic researchers at workshops and seminars. They may be published in academic books and journals.

Data appearing in any of the above will not be 'personal' and the anonymity of all participants is protected.

My contact details:

If you have any further questions, or want to follow up on any aspect of the research, you can contact me:

Rean van der Merwe
Department of Computing
The Open University,
Walton Hall, Milton Keynes
UK, MK7 6AA.
Phone: +27(0)217801296
Email: r.vandermerwe@open.ac.uk

If you have a question or concern about the research.

If you have a question or concern about any aspect of this research, you can also contact my academic supervisor:

Anthony Meehan
Department of Computing,
The Open University,
Walton Hall, Milton Keynes
UK, MK7 6AA
Phone: +44(0)1908 659049
Email: a.s.meehan@open.ac.uk

1.2 Questions/prompts used during the card sort interview

- What is the purpose of the message?
- How could you describe the content of the message, other than purely its literal subject matter?
- If the message relates to a problem/solution - does it imply who is involved in the decision or action? Is there a sense of collective action, or of briefing an audience?
- What sort of problem is being discussed?
- What are the likely outcomes of the discussion - how does it relate to the "offline" world?
- Is there a difference in the process, mechanics or style of communication?
- Is the message about things/events, or about ideas/values - and how so?
- Does the message propose a specific role of the poster, or of the audience.
- Is there any sense in which the message is "on behalf of" a group? Does the message convey a sense of "we" - and who is by implication included in that "we"?

1.3 Triad card sort: example of card

id	5	maillist	baboon	date sent	2010-02-14 10:39:35
from	[removed name]				
subject	Effective Baboon Repellent				
Ahoy all, Once a baboon is in your house you're on your own. When they are approaching the village or on the mountain a little too close for comfort they can be moved along swiftly and in a group without the startling intrusion of a human chaser. Whatsmore I can do this from my garden opposite [building name removed] while the babs are still well above [street name removed] Road. How does he do it? I hear you ask; well I get a large mirror and relfect the Sun at the alpha male this keeps the group moving along until they are no longer in the mirror's line of sight. [name removed] put me onto this. In close quarters I could see the big guy move off as if I had just released bad smell and the rest of the troop moved off with him. Regards [name removed]					

Note – I removed person and place names to retain anonymity for the purpose of this example. These were however present during the sort as the names provided key contextual information for participants.

Text, spelling, grammar exactly as in the original.

1.4 Triad card sort: example of data record

Participant: 13	Date: 20/06/2010	Sort no: 5
Construct: <i>Democracy</i>		
Dimension 1: <i>Addressing the group</i> Cards: 267, 553 [43:00] Issues resolved within the group, assuming collective action [45:50] Notes that people are very specific to mention the area they live in. Say both names of a couple, house number. Appears to be an attempt to come across as being sincere, trust the group, have nothing to hide (relates also to legitimacy) [55:20] Again comments on style of GN: matter of fact description. Habit of directing feedback at someone else.		Dimension 2: <i>Addressing the leader</i> Cards: 254 [54:15] By asking the community leader to please do something, it reinforces his role as leader
Notes: [58:30] We also discuss how sometimes, a message asks for feedback and gets no apparent response. Participant recounts that [moderator] explained he often just forwards directly, because he does not want to flood the list (given that people complain of volume). This creates the issue that some appeals appear to go unanswered, from which the rest then have no benefit - or may even make the wrong conclusions. Referring e.g. waste discussion.		

Notes:

Time-stamps are placed at key points in the record to refer back to digital recording. The record was completed by hand during interview, and the points then expanded where needed from recording as data was captured into database. Given that I could refer back to recording at random as needed, full transcripts were not made of comments.

Appendix 2 – STIN analysis

This exploration of the STIN methodology primarily follows the approach of Kling et al. (2003) as it is described in their evaluation of the effectiveness and sustainability of electronic scientific communication. The objective for the exploration was as much to test the STIN approach as candidate methodology, as to provide a visual overview of dynamics to support further research design.

2.1 Framing of the STIN approach

The name "socio-technical interaction networks" suggests three fundamental principles:

1. STIN focuses on networks:

The term network is used metaphorically, and refers to structured relationships between diverse elements in the use of a particular system, which "includes people (also organisations), equipment, data, resources (money, skill, status), documents and messages, legal arrangements and enforcement mechanisms, and resource flows." (ibid) The authors suggest that both elements and their relationships are heterogeneous - e.g. that relationships may be social, economic or political in nature - or potentially a complex combination of these.

2. STIN is concerned with interaction:

Kling uses the term "technology-in-use" when discussing the social and technical interactions, which he suggests "shape the work." He emphasizes the character of interactions "... that energise [e-forum] life."

3. The scope of STIN is socio-technical:

The authors further clarify that their use of the term "socio technological" denotes a tightly integrated conception of people and technology - which they contrast with authors in the field of socio-technical *systems* who (in their view) mainly investigate that technologies have social consequences, or study systems where a "technical layer" impacts the behaviour of participants as a result of the strengths and limitations of the toolset at a given time. Kling et al. illustrate their point with the example of amplifiers in lecture halls - which alter both the scope and nature of audiences that lecturers can reach and also alter the ways that people speak and interact. "Technologies are developed (and supported) within a social world ... technology-in-use and a social world are not separate entities - they co-constitute each other." In the context of e-forums, they define the STIN as a "network that brings together people and equipment in ways that are not meaningfully separable for understanding how [e-forums] work."

2.2 STIN methodology

As described by Kling et al.(2003), the STIN approach produces two main physical representations: a diagram of the network, and a narrative description to capture more subtle detail. The authors acknowledge the interpretative difficulty in modelling a network with these tools: "Constructing a STIN is the complex process of determining what are the relevant nodes and links: what is important enough to matter, and what linkage is so tangential that its impact on the whole is negligible? " They suggest an 8-step process as heuristic (rather than prescriptive process) in developing the STIN model:

1. Identify a relevant population of system interactors
2. Identify core interactor groups
3. Identify incentives
4. Identify excluded actors and undesired interactions
5. Identify existing communication forums
6. Identify system architectural choice points
7. Identify resource flows
8. Map architectural choice points to socio-technical characteristics

Letch et al (2008) contract the steps into three phases of analysis for their purpose:

1. stakeholder/actor analysis
2. network relationship analysis (identifying incentives, excluded actors, undesirable interaction and resource flows)
3. and network trajectory analysis.

The final design orientated steps are omitted in their use - in fact they specifically contrast STIN with Checkland's Soft Systems Method - suggesting that the latter would in their view be more suitable to designing systems interventions.

Kling et al. make the point that any network element may optionally be "unpacked" to describe in sufficient detail to understand. Letch et al extend this concept by defining a "series of interacting networks" based on relative influence and engagement with the specific case under investigation. In their case this leads to a more complete understanding of especially "indirect" participants who e.g. impact the system at the level of policy.

As a trial of the STIN approach, I broadly followed the directions of Kling et al. (2003) to analyse the case study. Since I was evaluating an existing system, I however took the approach of Letch et al. (2008) to de-emphasise the design-orientated stages of Kling's original formulation. Broadly, I made iterative use of the following steps:

1. Develop a list of relevant actors.
2. Consider ways they could be grouped into "roles" and their relationships modelled, e.g. using diagrams.
3. Select a model/approach that most clearly elicits relevant interaction dynamics.
4. Write narrative descriptions, considering aspects from Klings' approach such as resource flows, undesired interactions, existing channels.
5. Consider the implications
 - What information did this elicit?
 - How else may I have modelled the network?
 - What problems did I have to implement the approach?

2.3 Network diagrams

The following four STIN diagrams depict the research case modelled at different levels of detail.

Legend

- Irregular shapes indicate groups or associations of people
- Circles indicate "spaces" or technical environments
- Triangles indicate individuals
- Lines follow communication pathways

- Arrows indicate where there is a clear implication of “control over” or resource flow. In some cases, lines are used where the extent (or direction) of decision making power has yet to be established

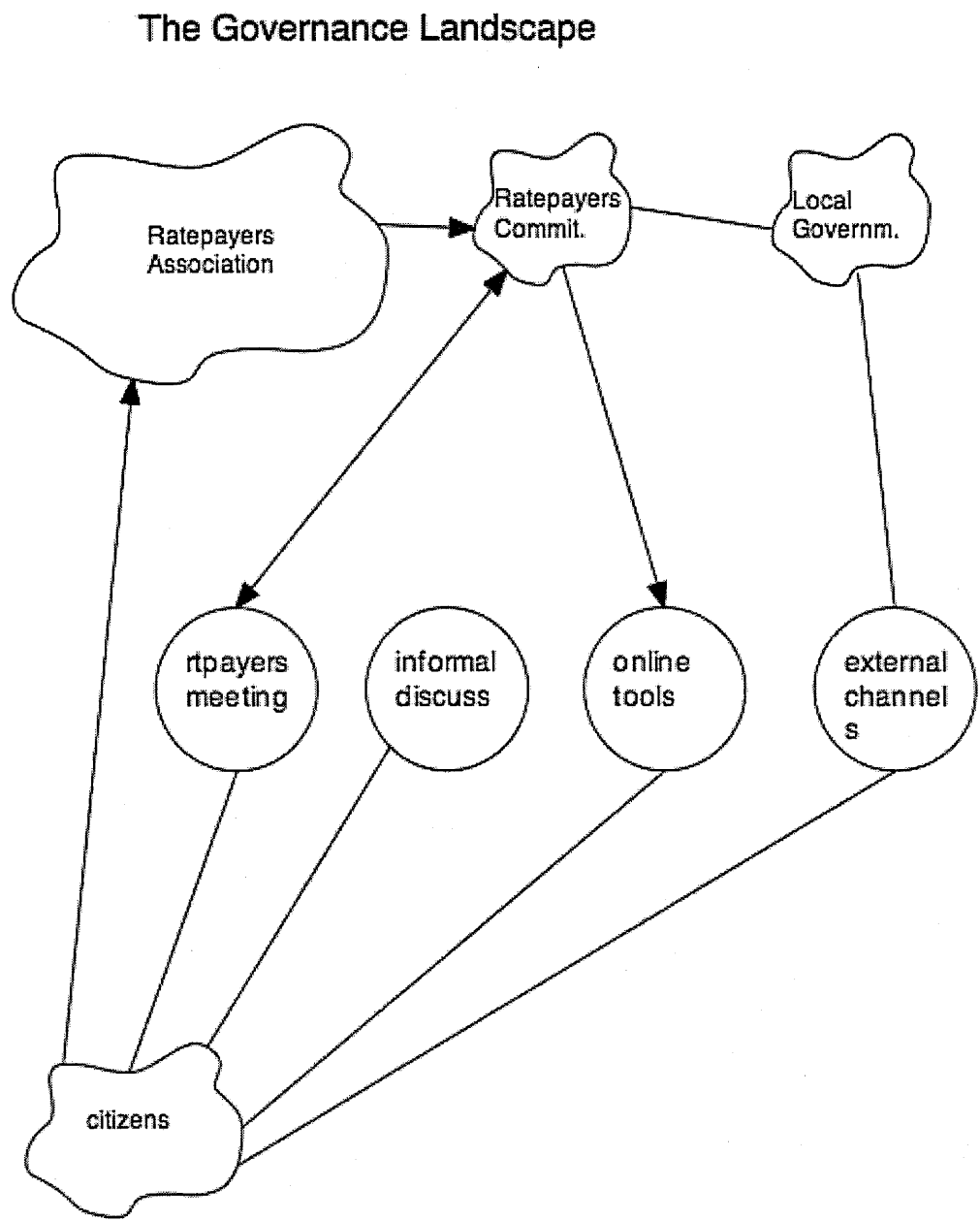


Figure A2.1. Overall governance environment

The Tech Landscape

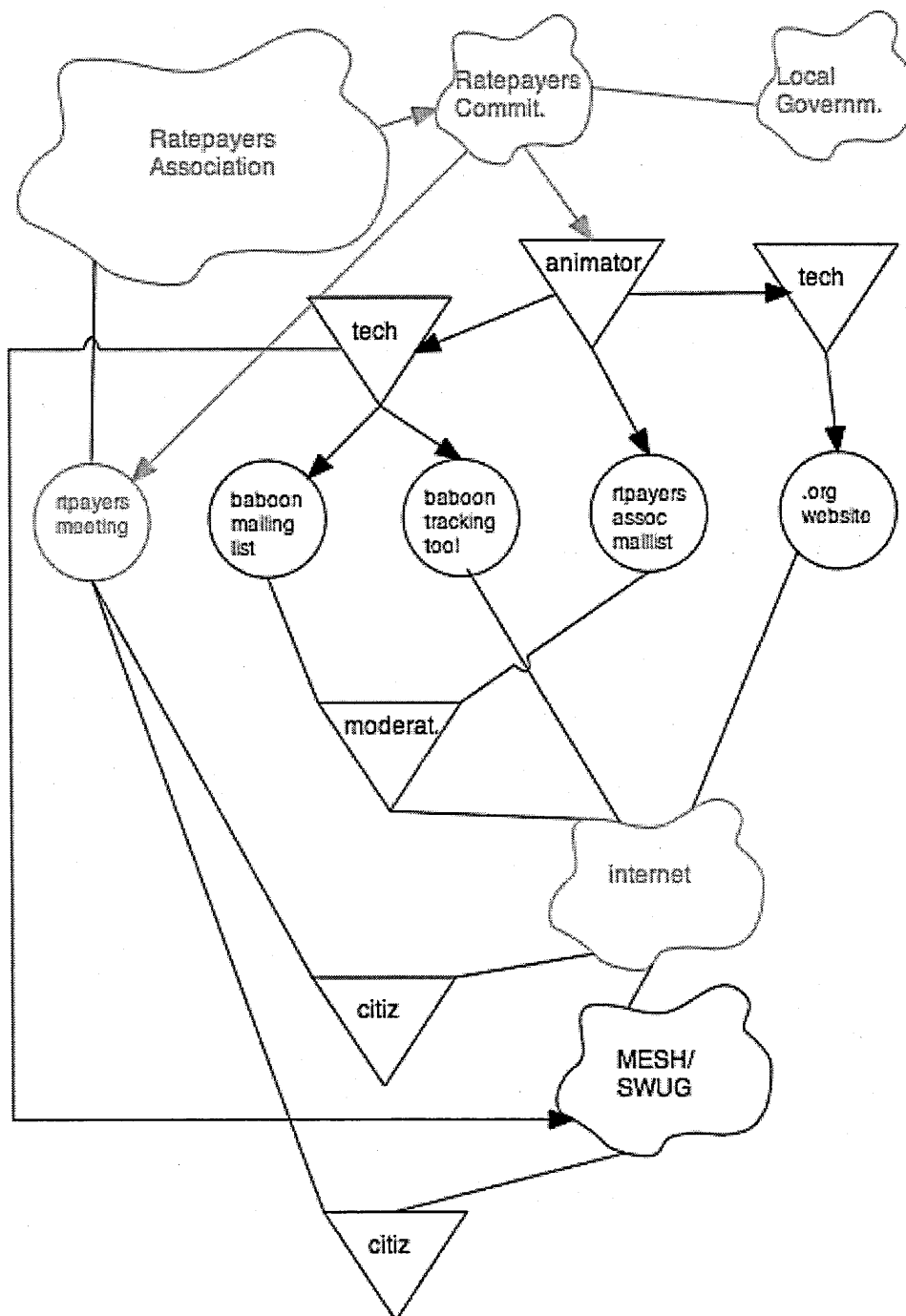


Figure A2.2. The technical components expanded

Note that I have greyed out the elements from governance diagram that provide context, but are not immediately relevant to this study.

Citizen Ego Network

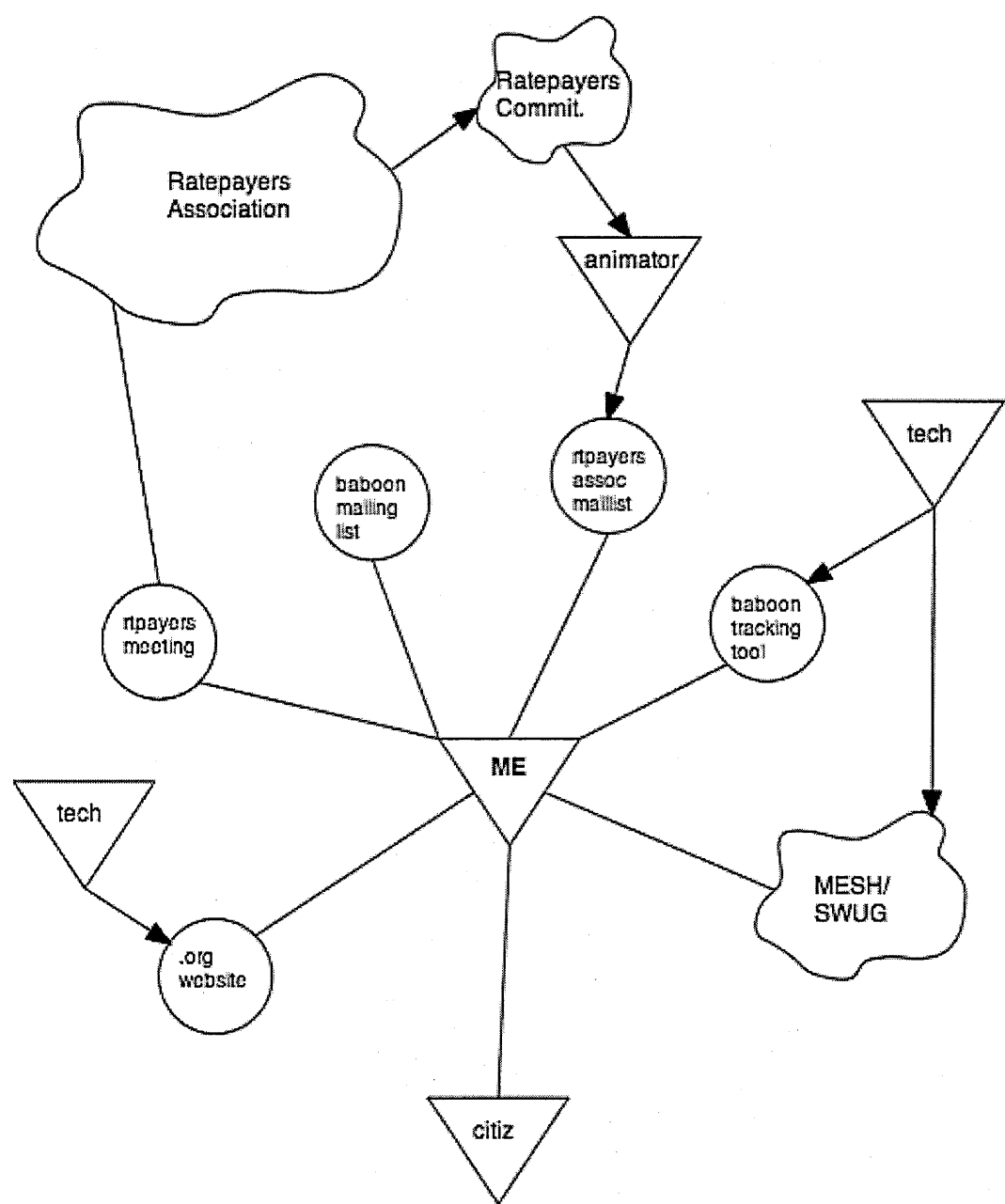


Figure A2.3. Users' perspective of technology

Technical Gatekeepers

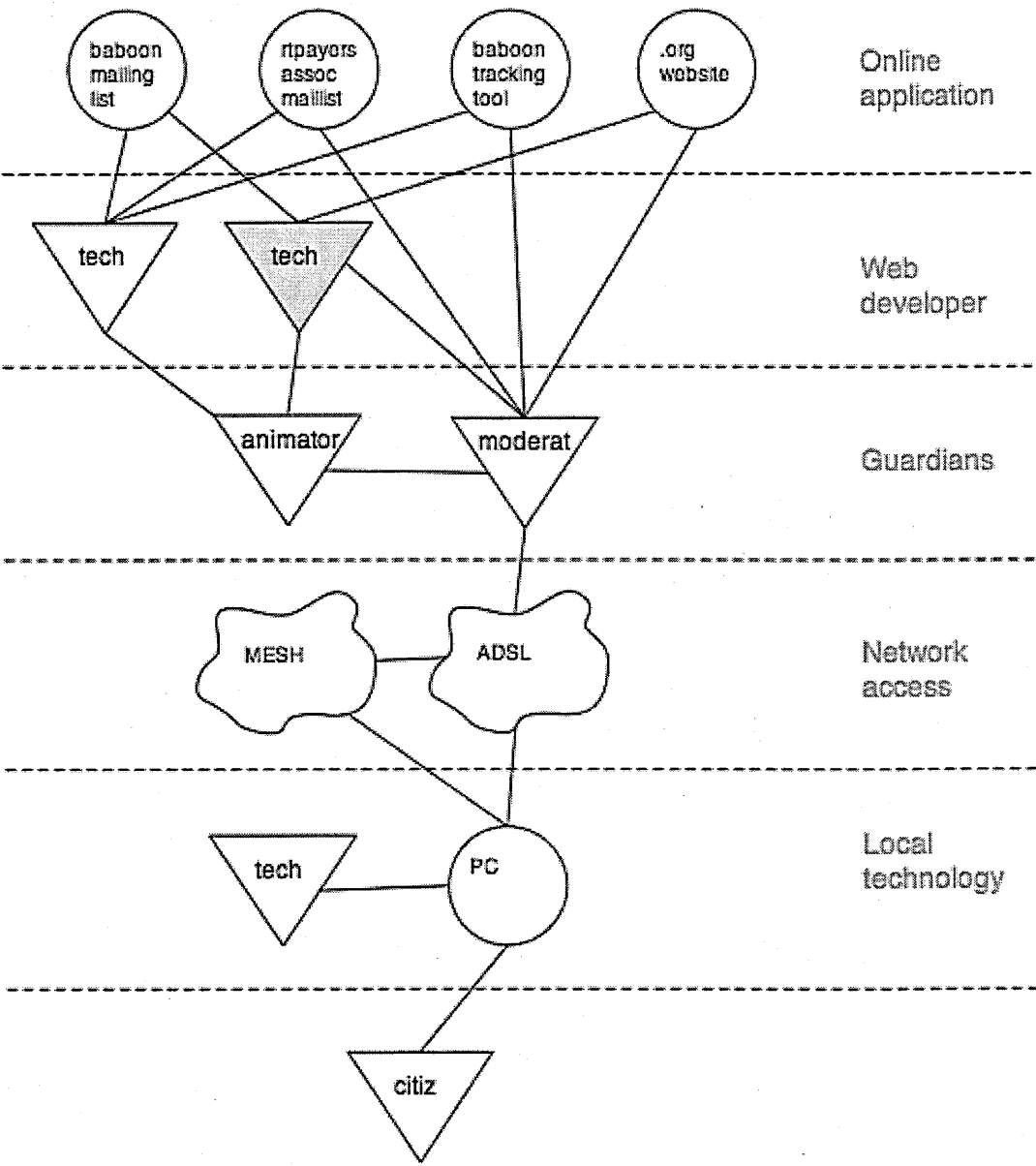


Figure A2.4. Technical gatekeepers

2.4 Narrative analysis of diagrams

2.4.1 Notes on ‘overall governance’ diagram (Figure A2.1)

I use the label “citizens” for want of a better term – I might otherwise have used “residents” or “constituents”. Residents can be members of the “Ratepayers association” if they own property and pay rates. In theory then, this is a democratic body – but one which does not formally represent visitors or tenants. In practice the latter get as involved as ratepayers in governance debates – though it is not clear the ultimately have the same “voice”. Members of the association elect the Ratepayers committee annually. Details of process and portfolio of members still need to be established. They make the practical decisions and interact with local government. There are regular offline ratepayers meetings – all can attend, but only paid up ratepayers can e.g. elect committee members. This appears to be the most significant channel of information/decision making which the web likely amplifies/supplements. Meetings are arranged and chaired by members of the committee – much as decisions at meetings are recorded in minutes and need to be enacted by committee members (or often residents also).

Informal discussion clearly contributes significantly to governance. It is unclear to what extent the effect of these on decision-making can be modelled – so no line indicated upwards. Online tools are unpacked in more detail in a following diagram. Significantly, the tools are developed under the direction of the ratepayers committee. It is not clear how information/deliberation from here informs or steers decision-making. The phrase “external channels” is meant to indicate a range of media outside the immediate scope of this study, which might include other web as well as offline spaces, newspapers etc.

The objective following from the first model is to understand, within the modelled context, what role the “online tools” play in governance – possibly compared along specific dimensions to other channels also.

2.4.2 Notes on expanded technical view (Figure A2.2)

The network animator, with authority delegated (or assumed granted) by the Ratepayers Committee, interacts with two different developers (tech) to produce and maintain the various online environments. The relationship is relatively informal – it remains to be established how much control or direction is exercised in either direction. The animator relies on techs to set up and maintain the integrity of solutions – except for the ratepayers list which is simply a Google mailbox. The techs have very different profiles – the one, an internet business owner with large premises in the village, developed the official .org website as corporate social responsibility; the other a community activist (with substantially different values) set up the various mailing lists, and independently created and maintains a community mesh network. While both provide expertise and time as a community service, the latter is significantly more visible in governance dialogue. In the past, where techs had moved to another town, the environments they developed eventually collapsed – partly as a result of technical issues, but also because others did not have the impetus to take ownership and maintain the environment. This was particularly evident where an environment was effectively the “hobby” of one person.

Four online environments have been identified:

- A mailing list dedicated to the discussion of baboon management – an attempt to

remove a controversial and high volume topic from the main community list to a space where anyone who chose to become engaged could literally “fight it out”.

- A tool for tracking baboon raids on houses – which ironically started as a crime-tracking tool, but was diverted because it increased the visibility and memory of crime incidents. The use for tracking baboons is no less controversial and there have been deliberate attempts to sabotage reporting.

- The ratepayers mailing list – official communication channel for anything from governance issues to reporting lost pets. Strongly moderated, it is in truth a single incoming mailbox, with outgoing messages manually forwarded to one of five collections of residents as the moderator judges appropriate.

- The most recent incarnation of the village .org website – which includes a web based forum. This is the third revised version, and appears to have fallen out of favour as a discursive space.

Citizens/residents have the option to connect to the internet for free via a community mesh network (relatively rare still in SA) with associated “Wireless User Group”. This is considered a “hygiene factor” since a direct connection via the national telco is relatively expensive, but also a potential driver of interaction.

There are various potential vectors of influence implied in this model, in many cases created by the requirements and affordances of technology. How do these practically influence the process or outcome of governance dialogue? How do each of the three ‘roles’ identified perceive the technology, the possible vectors of influence, and the contingency of the online public sphere?

2.4.3 Notes on users' perspective (Figure A2.3)

This model depicts the network elaborated from the perspective of a user or resident. AS I developed the model from personal experience, more data would be needed to validate the extent to which this reflects the perceptions of other residents. The user is placed at the centre of a portfolio of tools – potentially empowering, but also requiring varying levels of investment to become familiar with and manage. The relationships between elements are also not directly visible. The techs and animator are associated with tools, but not shown as “gatekeepers” – in other words not between a user and any given channel as indicated in other diagrams.

Are the “gatekeepers” perceived as vectors of influence through the environments they shape? Do people have a sense of being “co-opted” if they participate – and how do they perceive the contingency of participation?

2.4.4. Notes on technical gatekeepers (Figure A2.4)

This model depicts the various barriers, or gatekeeper roles, in effect *created* by technology.

Considered from the bottom (of the diagram) upwards:

A user or citizen requires access to a local computer (PC) and software to be able to access the online tools. In many cases, this implies the help of a local expert to help set up the PC - and being cut off when they are not available to debug problems.

Network access is traditionally available through the national Telco. The community mesh network provides an alternative for the “last mile” of connectivity. The mesh can be used for free provided a user has an appropriate wireless router, though

paying users have priority when the network becomes busy. For paying users the cost is still less than 1/4 of access via the Telco.

In reality, all online environments are moderated by what I refer to as “guardians”. Without these, the forums have in the past succumbed to spam or interaction that the majority of users considered inappropriate (e.g. repeated personal attacks, profanity). None the less, the guardians or moderators potentially influence dialogue and users are technically reliant on them. Web developers maintain the technical integrity of solutions, and shape the affordances offered by the technology. These applications further present potential technical barriers, and potentially shape interaction.

While it is worth discussing this network elaboration from a governance perspective, not much in this diagram is “new” from a theoretical point of view. It may however serve to help structure discussion – to consider only certain “tiers” in detail, and to separate forces in a way that simplifies analysis

2.5 Evaluation of the STIN methodology

King et al. (2003) provide little guidance, beyond their 8-step heuristic, in actually implementing a STIN analysis. They acknowledge the interpretive difficulty in developing the model - a concern similarly noted for ANT: the absence of 'out-of-network' criteria for judging the relevance of actors or the validity (representativeness) of a given model.

My own models developed most successfully by choosing the perspective of a "role" within the network to act as filter. This has the advantage that the model could be

verified against the experience of actors who act in such a role, and that it represented a "point of view", rather than generalised abstraction of many viewpoints in the system. It also resulted in analysis at more fine-grained level, which appeared to be more directly useful in evaluating the interactions with technology itself. I did however find it challenging to model interactions with technology at the level of technical "affordances," instead being forced to view the technology as an 'actor' and therefore relatively opaque to the network modelling.

Related to this, the suggested step of identifying incentive structure assumes that motivations are relatively transparent or correctly reported. In practice, while there may be explicit incentives, humans do not act as predictably - their own motivations may not be clear to them. This suggests the requirement for rigor especially during knowledge elicitation - for example for semi-structured questionnaires to be supplemented with a laddering process. The authors do note that inevitably a theory of social action will be implicit at this stage, and should be made explicit. My own brief analysis might certainly be made more robust with such an addition. In general, STIN provides little guidance on how information is elicited - analysis may well benefit by being supplemented during this phase.

Overall, I found the STIN models served well to elaborate high-level socio-technical dynamics within the case study - though in my application perhaps focused on human and organizational relationships, rather than on the potential social-engineering affordances of the web platform. It will require further work to establish whether its implied methodology lends itself to this level of analysis.

Meyer (2006) criticises that both STIN and ANT models are potentially descriptive - rather than offering explanation. I found my own attempts offered potential explanation of behaviour by way of making some incentives more explicit - and showing how relevant resources might move within the network, making the network structure explicit. The models do however offer limited potential to draw conclusions on role of technology at fine-grained level – for example to understand how particular affordances have an impact on interactions within the case. One might potentially exchange one technology for another without affecting any of the models I had developed.